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# ***WATER SUPPLY OUTLOOK FOR MONTANA***

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

UNITED STATES DEPARTMENT of AGRICULTURE...SOIL CONSERVATION SERVICE,

and  
MONTANA AGRICULTURAL EXPERIMENT STATION

Data included in this report were obtained by the agencies named above in cooperation with Federal, State, and private organizations listed on the inside back cover of this report.

**SNOW PILLOW RECORDS  
1969 WATER YEAR**

## TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1400 snow courses in Western United States and in the Columbia Basin in British Columbia. In the near future, it is anticipated that automatic snow water equivalent sensing devices along with radio telemetry will provide a continuous record of snow water equivalent at key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

## PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

| STATE              | ADDRESS   |
|--------------------|---|
| Alaska             | P. O. Box "F", Palmer, Alaska 99645               |
| Arizona            | 6029 Federal Building, Phoenix, Arizona 85205     |
| Colorado (N. Mex.) | 12417 Federal Building, Denver, Colorado 80521    |
| Idaho              | P. O. Box 38, Boise, Idaho 83707                  |
| Montana            | P. O. Box 98, Bozeman, Montana 59715              |
| Nevada             | P. O. Box 4850, Reno Nevada 89505                 |
| Oregon             | 1218 S. W. Washington St., Portland, Oregon 97205 |
| Utah               | 4012 Federal Building, Salt Lake City, Utah 84111 |
| Washington         | 360 U.S. Court House, Spokane, Washington 99201   |
| Wyoming            | P. O. Box 340, Casper, Wyoming 82602              |

## PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



**WATER SUPPLY OUTLOOK  
FOR  
MONTANA**

and  
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

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MONTANA WATER SUPPLY OUTLOOK  
October 1, 1969

MISSOURI RIVER BASIN

The 1969 water year began with extremely heavy snowfall during the early winter months, with a gradual decrease percentagewise in snow accumulation through the remainder of the season. The spring and summer months were relatively dry, with the exception of some areas which received heavy precipitation during June.

The snowpack was below average in the Marias, Sun and Teton river drainages. The below average precipitation pattern continued during the spring and summer months. However, reservoir storage was generally adequate for maturing crops on irrigated lands.

Southwestern Montana had a heavy snowpack and received adequate precipitation during the spring and summer months. Some areas had an April-September runoff in excess of 200 percent of average.

Streamflow on the Yellowstone river drainage was near average with the exception of above average runoff in the main stream headwaters.

Most mountain soils are generally drier than normal and will need adequate fall rains or some of next year's snowmelt for repriming.

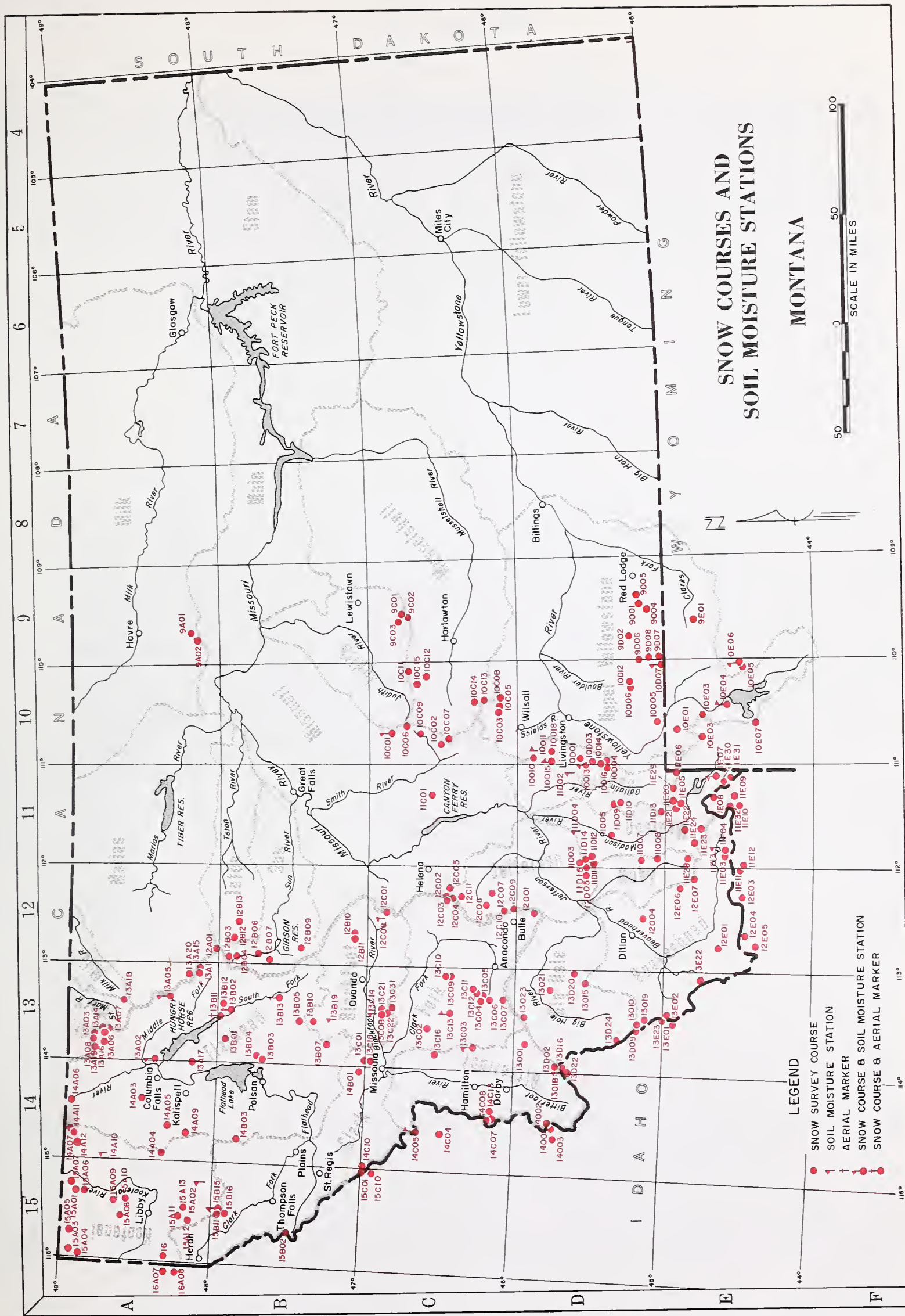
Irrigation reservoir storage is generally below average as a result of the drier summer months and heavy irrigation demands.

COLUMBIA RIVER BASIN

Well above average snowfall occurred in the early part of the 1969 water year. Snowfall accumulation decreased percentagewise after March. Precipitation was generally deficient over the basin during the spring and summer months; however, significant amounts were received in some areas during June. In general, the heavy runoff occurred earlier than normal.

Most mountain soils are drier than normal. Prospects for next year's water supply will depend largely on the snowpack accumulation during the coming winter months.





INDEX to MONTANA SNOW COURSES and SOIL MOISTURE STATIONS

SNOW COURSES

| Number | Elev. | Sec. | Typ. | Range | Record<br>Begin | Measuring<br>Dates $\frac{M}{D}$ | Means,<br>By $\frac{M}{D}$ |
|--------|-------|------|------|-------|-----------------|----------------------------------|----------------------------|
|--------|-------|------|------|-------|-----------------|----------------------------------|----------------------------|

COLUMBIA RIVER BASIN

|                |       |      |     |     |      |                |                |     |
|----------------|-------|------|-----|-----|------|----------------|----------------|-----|
| KOOTENAI RIVER | 15A11 | 5700 | 27N | 31W | 1969 | 3,4,5          | 1              |     |
|                | 15A12 | 5700 | 27N | 31W | 1969 | 1,2,3,4,5,5½,6 | 1              |     |
|                | 15A13 | 5700 | 26N | 31W | 1966 | 3,4,5,5½       | 2              |     |
|                | 15B16 | 4600 | 36  | 26N | 30W  | 1965           | 3,4,5,5½       | 2   |
|                | 15B15 | 3800 | 5   | 32N | 30W  | 1966           | 1,2,3,4,5,5½   | 2   |
|                | 15A10 | 4200 | 3   | 32N | 30W  | 1969           | 1,2,3,4,5,5½   | 1,2 |
|                | 14A04 | 5000 | 12  | 30N | 26W  | 1937           | 3,4,5          | 1   |
|                | 15A13 | 4200 | 35  | 28N | 31W  | 1969           | 1,2,3,4,5,5½,6 | 1   |
|                | 15A06 | 5200 | 30  | 27N | 33W  | 1969           | 3,4,5,5½,6     | 1   |
|                | 15A07 | 5200 | 35  | 27N | 33W  | 1969           | 1,2,3,4,5,5½,6 | 1   |
|                | 15A11 | 4250 | 18  | 37N | 32W  | 1969           | 1,2,3,4,5,5½,6 | 1,2 |
|                | 14A11 | 4300 | 1   | 36N | 25W  | 1937           | 3,4,5,5½,6     | 1,2 |
|                | 15A09 | 3300 | 25  | 30N | 35W  | 1969           | 1,2,3,4,5,5½,6 | 1   |
|                | 15A19 | 5100 | 31  | 22N | 31W  | 1969           | 1,2,3,4,5,5½,6 | 1   |
|                | 15A01 | 6000 | 4   | 36N | 29W  | 1969           | 3,4,5,5½,6     | 1,2 |
| KOOTENAI RIVER | 14A12 | 6050 | 5   | 36N | 25W  | 1969           | 3,4,5,5½,6     | 1,2 |
|                | 14A07 | 5450 | 20  | 37N | 24W  | 1937           | 3,4,5,5½,6     | 1,2 |

|                |       |      |    |     |     |      |                              |     |
|----------------|-------|------|----|-----|-----|------|------------------------------|-----|
| FLATHEAD RIVER | 14B03 | 5150 | 11 | 24N | 25W | 1961 | 3,4,5                        | 1,5 |
|                | 14A11 | 5900 | 51 | 22N | 18W | 1941 | 3,4,5                        | 1,5 |
|                | 14A17 | 6000 | 21 | 22N | 18W | 1941 | 3,4,5                        | 6   |
|                | 13A17 | 5600 | 24 | 31N | 19W | 1937 | 1,2,3,4,5,5 $\frac{1}{2}$    | 1,2 |
|                | 13B04 | 5300 | 8  | 22N | 18W | 1962 | 3,4,5,5 $\frac{1}{2}$        | 6   |
|                | 13A19 | 6300 | 12 | 35N | 18W | 1968 | 1,2,3,4,5,5 $\frac{1}{2}$ ,6 | 1,5 |
|                | 14A09 | 5150 | 11 | 28N | 25W | 1960 | 3,4,5                        | 6   |
|                | 13B12 | 6300 | 30 | 32N | 22W | 1962 | 1,2,3,4,5,5 $\frac{1}{2}$ ,6 | 2   |
|                | 13B13 | 4530 | 18 | 21N | 13W | 1951 | 1,2,3,4,5                    | 1,2 |
|                | 14A06 | 3950 | 14 | 37N | 22W | 1934 | 3,4                          | 6   |
|                | 13A05 | 4250 | 34 | 30N | 24W | 1937 | 1,2,3,4,5                    | 1,2 |
|                | 13A05 | 5250 | 34 | 30N | 14W | 1934 | 3,4,5,5 $\frac{1}{2}$ ,6     | 3   |
|                | 13B07 | 6330 | 29 | 35N | 17W | 1957 | 3,4,5,5 $\frac{1}{2}$ ,6     | 6   |
|                | 13B07 | 6330 | 30 | 25N | 15W | 1948 | 1,2,3,4,5,5 $\frac{1}{2}$ ,6 | 1,5 |
|                | 13B01 | 6100 | 9  | 25N | 17W | 1948 | 3,4,5                        | 1   |

|                  |       |      |    |     |     |      |                              |     |
|------------------|-------|------|----|-----|-----|------|------------------------------|-----|
| CLARK FORK RIVER | 13B05 | 6200 | 28 | 20N | 15W | 1948 | 1,2,3,4,5                    | 1   |
|                  | 13B07 | 6330 | 29 | 35N | 17W | 1957 | 3,4,5,5 $\frac{1}{2}$ ,6     | 6   |
|                  | 13B07 | 6330 | 30 | 25N | 15W | 1948 | 1,2,3,4,5,5 $\frac{1}{2}$ ,6 | 1,5 |
|                  | 13B01 | 6100 | 9  | 25N | 17W | 1948 | 3,4,5                        | 1   |
|                  | 13B11 | 3580 | 24 | 26N | 16W | 1951 | 1,2,3,4,5                    | 1   |
|                  | 13B05 | 6200 | 28 | 20N | 15W | 1948 | 1,2,3,4,5                    | 1   |
|                  | 13B07 | 6330 | 29 | 35N | 17W | 1957 | 3,4,5,5 $\frac{1}{2}$ ,6     | 6   |
|                  | 13B07 | 6330 | 30 | 25N | 15W | 1948 | 1,2,3,4,5,5 $\frac{1}{2}$ ,6 | 1,5 |
|                  | 13B01 | 6100 | 9  | 25N | 17W | 1948 | 3,4,5                        | 1   |
|                  | 13B11 | 3580 | 24 | 26N | 16W | 1951 | 1,2,3,4,5                    | 1   |
|                  | 13B05 | 6200 | 28 | 20N | 15W | 1948 | 1,2,3,4,5                    | 1   |
|                  | 13B07 | 6330 | 29 | 35N | 17W | 1957 | 3,4,5,5 $\frac{1}{2}$ ,6     | 6   |
|                  | 13B07 | 6330 | 30 | 25N | 15W | 1948 | 1,2,3,4,5,5 $\frac{1}{2}$ ,6 | 1,5 |
|                  | 13B01 | 6100 | 9  | 25N | 17W | 1948 | 3,4,5                        | 1   |
|                  | 13B11 | 3580 | 24 | 26N | 16W | 1951 | 1,2,3,4,5                    | 1   |

|              |       |      |    |     |     |      |                              |   |
|--------------|-------|------|----|-----|-----|------|------------------------------|---|
| JUDITH RIVER | 9C02  | 7100 | 24 | 12N | 17E | 1966 | 3,4,5                        | 1 |
|              | 9C03  | 5600 | 8  | 12N | 18E | 1966 | 3,4,5                        | 1 |
|              | 10C06 | 8000 | 20 | 12N | 9E  | 1963 | 1,2,3,4,5,5 $\frac{1}{2}$ ,6 | 1 |
|              | 13A15 | 6900 | 4  | 27N | 11W | 1964 | 3,4,5                        | 1 |
|              | 13A20 | 5200 | 25 | 23N | 10W | 1969 | 3,4,5                        | 2 |
|              | 12B09 | 5700 | 23 | 20N | 10W | 1948 | 3,4,5                        | 1 |
|              | 12A01 | 6000 | 15 | 26N | 10W | 1948 | 3,4,5                        | 1 |
|              | 12B07 | 7000 | 20 | 22N | 10W | 1934 | 3,4,5                        | 3 |
|              | 12B12 | 6400 | 18 | 24N | 9W  | 1969 | 3,4,5,5 $\frac{1}{2}$ ,6     | 2 |
|              | 12B13 | 5650 | 17 | 25N | 9W  | 1969 | 3,4,5                        | 2 |
|              | 12B04 | 6800 | 17 | 25N | 10W | 1969 | 3,4,5                        | 2 |
|              | 12B03 | 6800 | 17 | 25N | 10W | 1969 | 3,4,5                        | 2 |
|              | 13A15 | 6900 | 4  | 27N | 11W | 1964 | 3,4,5                        | 1 |
|              | 13A20 | 5200 | 25 | 23N | 10W | 1969 | 3,4,5                        | 2 |
|              | 12B09 | 5700 | 23 | 20N | 10W | 1948 | 3,4,5                        | 1 |

|                      |       |      |    |    |     |      |                          |     |
|----------------------|-------|------|----|----|-----|------|--------------------------|-----|
| MISSOURI RIVER BASIN | 13C16 | 6480 | 28 | 9N | 18W | 1960 | 3,4,5                    | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4                      | 1,3 |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |

|                  |       |      |    |     |     |      |         |     |
|------------------|-------|------|----|-----|-----|------|---------|-----|
| BEAVERHEAD RIVER | 13D10 | 7660 | 12 | 8S  | 16W | 1968 | 3,4,5   | 1   |
|                  | 13D04 | 7400 | 22 | 12S | 12W | 1963 | 2,3,4,5 | 1,1 |
|                  | 13D05 | 7800 | 21 | 4S  | 12W | 1935 | 3,4,5   | 1   |
|                  | 13D15 | 8100 | 11 | 8S  | 16W | 1948 | 3,4,5   | 1   |
|                  | 11E04 | 6930 | 26 | 14S | 2W  | 1948 | 3,4,5   | 10  |
|                  | 11B03 | 7400 | 27 | 14S | 2W  | 1948 | 3,4,5   | 1   |
|                  | 12B01 | 7400 | 9  | 10S | 15W | 1967 | 3,4     | 1   |
|                  | 12B03 | 7560 | 15 | 16S | 15W | 1968 | 3,4     | 1   |
|                  | 12B01 | 7400 | 9  | 10S | 15W | 1967 | 3,4     | 1   |
|                  | 12B03 | 7560 | 15 | 16S | 15W | 1968 | 3,4     | 1   |
|                  | 12B01 | 7400 | 9  | 10S | 15W | 1967 | 3,4     | 1   |
|                  | 12B03 | 7560 | 15 | 16S | 15W | 1968 | 3,4     | 1   |
|                  | 12B01 | 7400 | 9  | 10S | 15W | 1967 | 3,4     | 1   |
|                  | 12B03 | 7560 | 15 | 16S | 15W | 1968 | 3,4     | 1   |
|                  | 12B01 | 7400 | 9  | 10S | 15W | 1967 | 3,4     | 1   |

|                      |       |      |    |     |     |      |                          |     |
|----------------------|-------|------|----|-----|-----|------|--------------------------|-----|
| ST. MARY RIVER BASIN | 13A18 | 5800 | 24 | 34N | 13W | 1963 | 3,4,5                    | 3,9 |
|                      | 13A19 | 5600 | 21 | 35N | 17W | 1932 | 3,4,5                    | 3,9 |
|                      | 13A17 | 5700 | 22 | 35N | 16W | 1942 | 5                        | 3,9 |
|                      | 13A07 | 5700 | 27 | 35N | 16W | 1942 | 5                        | 3,9 |
|                      | 13A06 | 5800 | 36 | 36N | 17W | 1937 | 5                        | 3,9 |
|                      | 13C16 | 6480 | 28 | 9N  | 18W | 1960 | 3,4,5                    | 1   |
|                      | 13C01 | 5400 | 16 | 2N  | 17W | 1937 | 3,4                      | 1,3 |
|                      | 13C02 | 5400 | 16 | 2N  | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N  | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N  | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N  | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N  | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N  | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N  | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N  | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |

|                  |       |      |    |    |     |      |                          |     |
|------------------|-------|------|----|----|-----|------|--------------------------|-----|
| BITTERROOT RIVER | 13C16 | 6480 | 28 | 9N | 18W | 1960 | 3,4,5                    | 1   |
|                  | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4                      | 1,3 |
|                  | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                  | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                  | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                  | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                  | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                  | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                  | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                  | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                  | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                  | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                  | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                  | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                  | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |

|                      |       |      |    |    |     |      |                          |     |
|----------------------|-------|------|----|----|-----|------|--------------------------|-----|
| MISSOURI RIVER BASIN | 13C16 | 6480 | 28 | 9N | 18W | 1960 | 3,4,5                    | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4                      | 1,3 |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C01 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      | 13C02 | 5400 | 16 | 2N | 17W | 1937 | 3,4,5,5 $\frac{1}{2}$ ,6 | 1   |
|                      |       |      |    |    |     |      |                          |     |

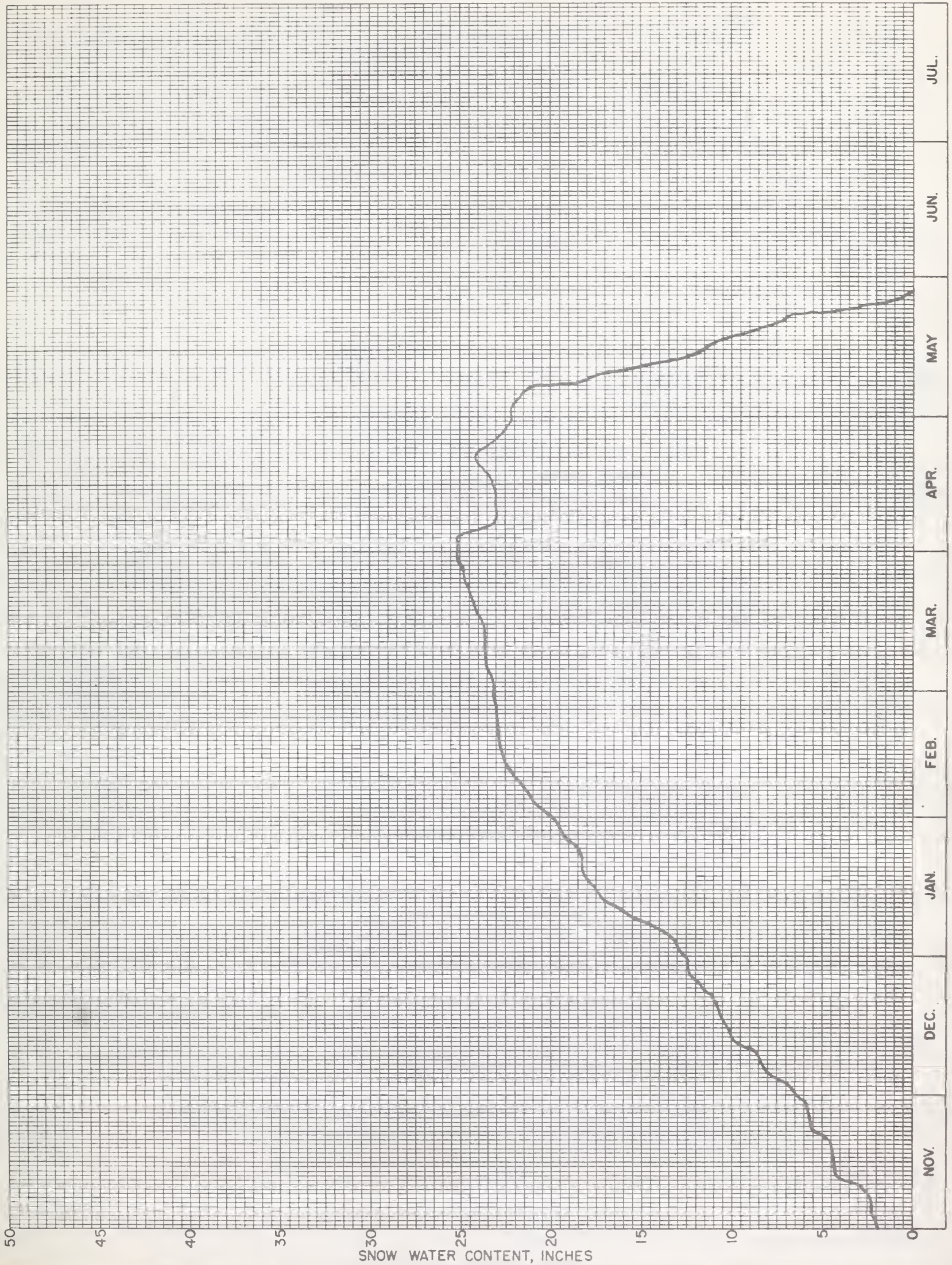
SNOW PILLOW DATA  
WATER YEAR 1969

BANFIELD MOUNTAIN

No. 15A08

Elev. 5600

Drainage: Kootenai





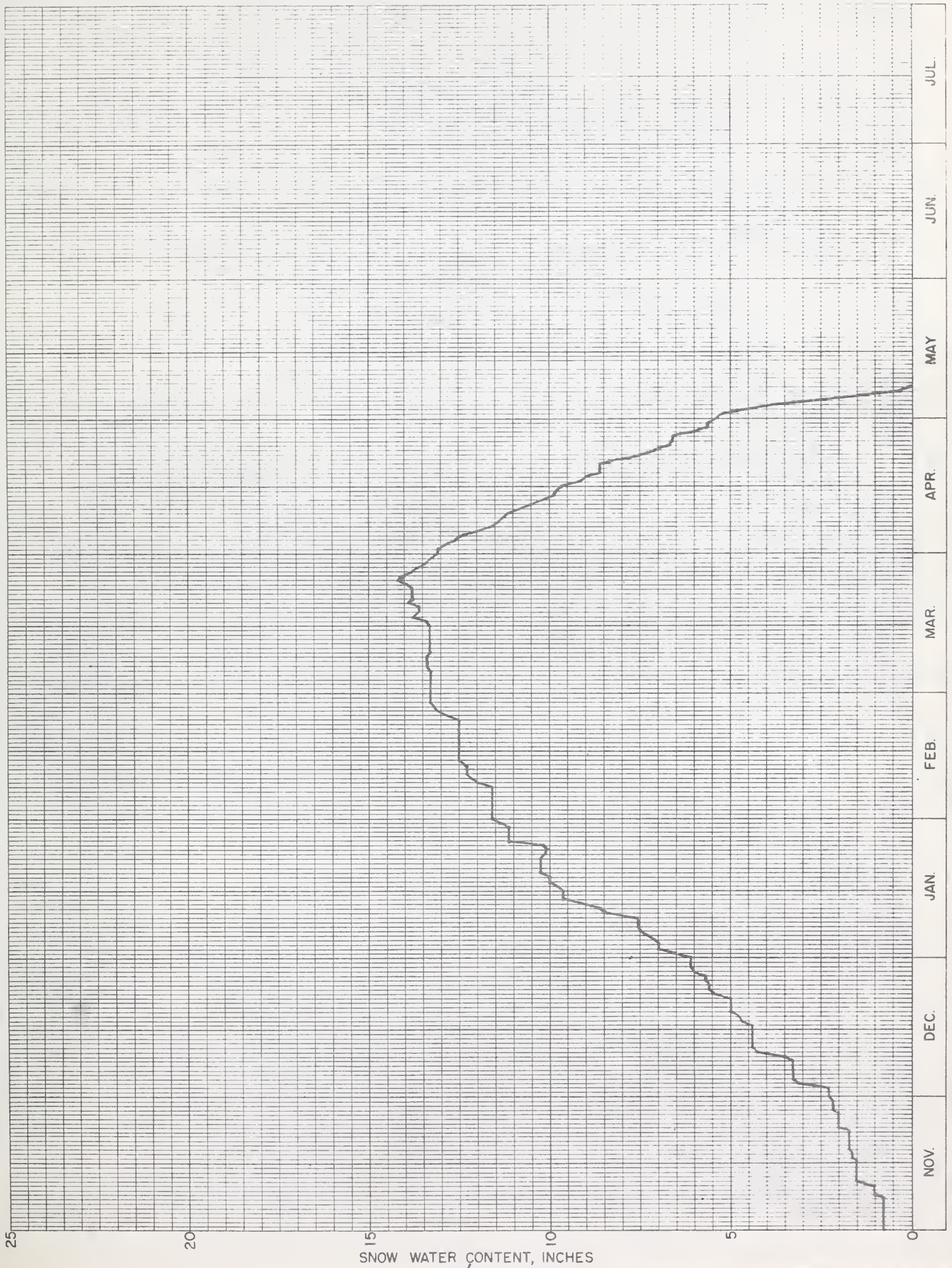
SNOW PILLOW DATA  
WATER YEAR 1969

GARVER CREEK

No. 15A05

Elev. 4250

Drainage: Kootenai



SNOW WATER CONTENT, INCHES



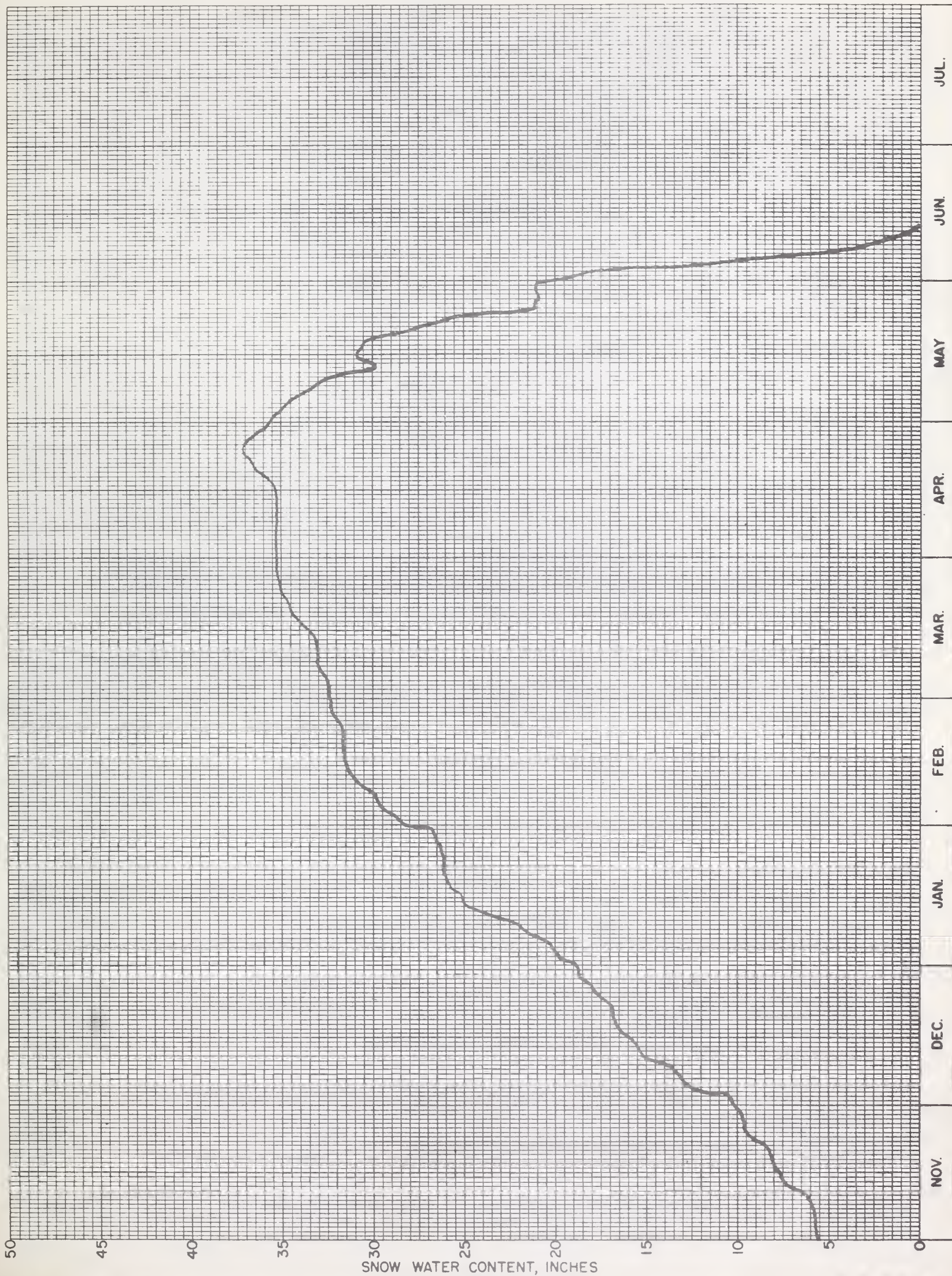
SNOW PILLOW DATA  
WATER YEAR 1969

HAWKINS LAKE

No. 15A03

Elev. 6450

Drainage: Kootenai

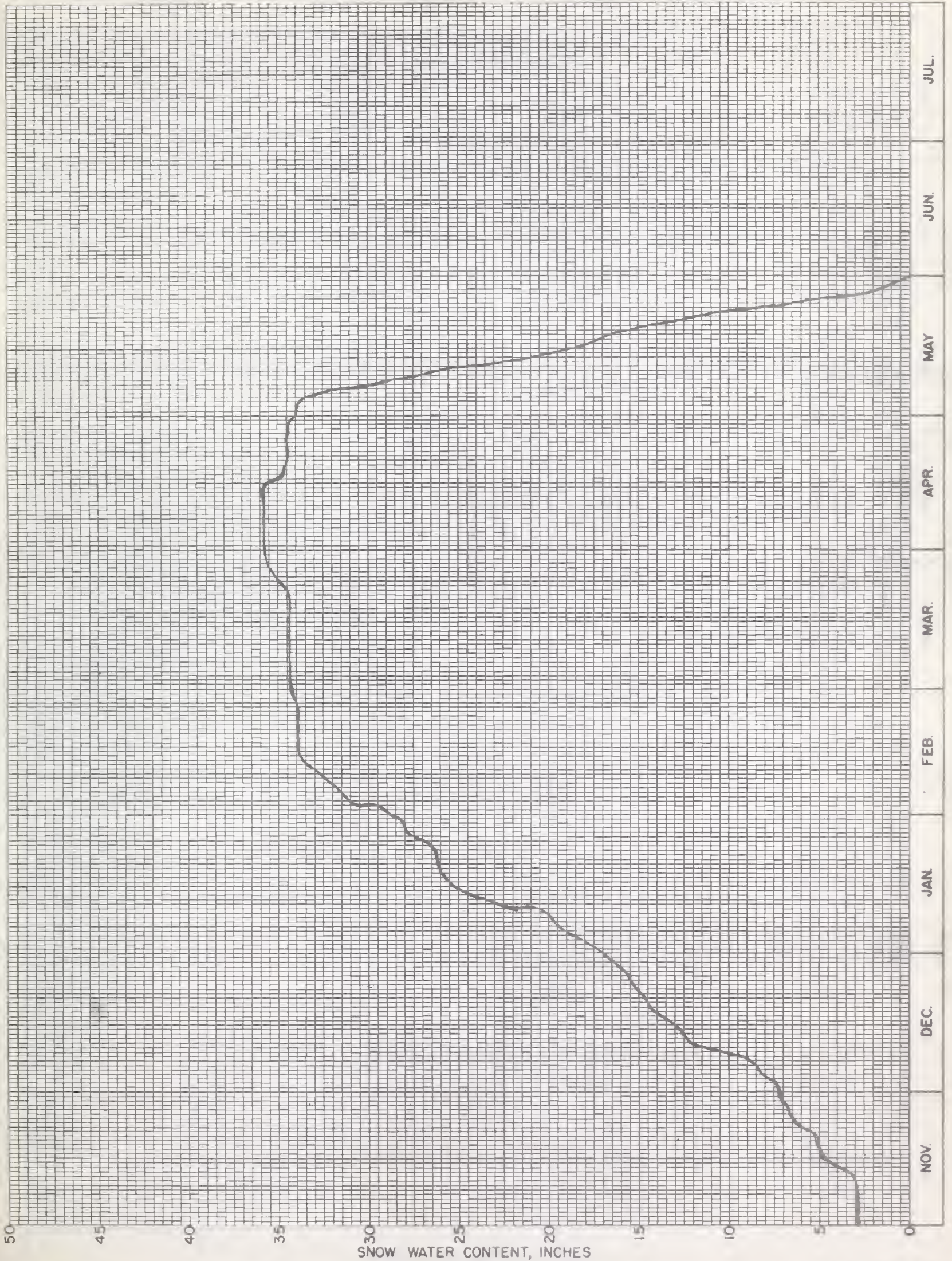




SNOW PILLOW DATA  
WATER YEAR 1969

POORMAN CREEK

No. 15A12 Elev. 5100 Drainage: Kootenai





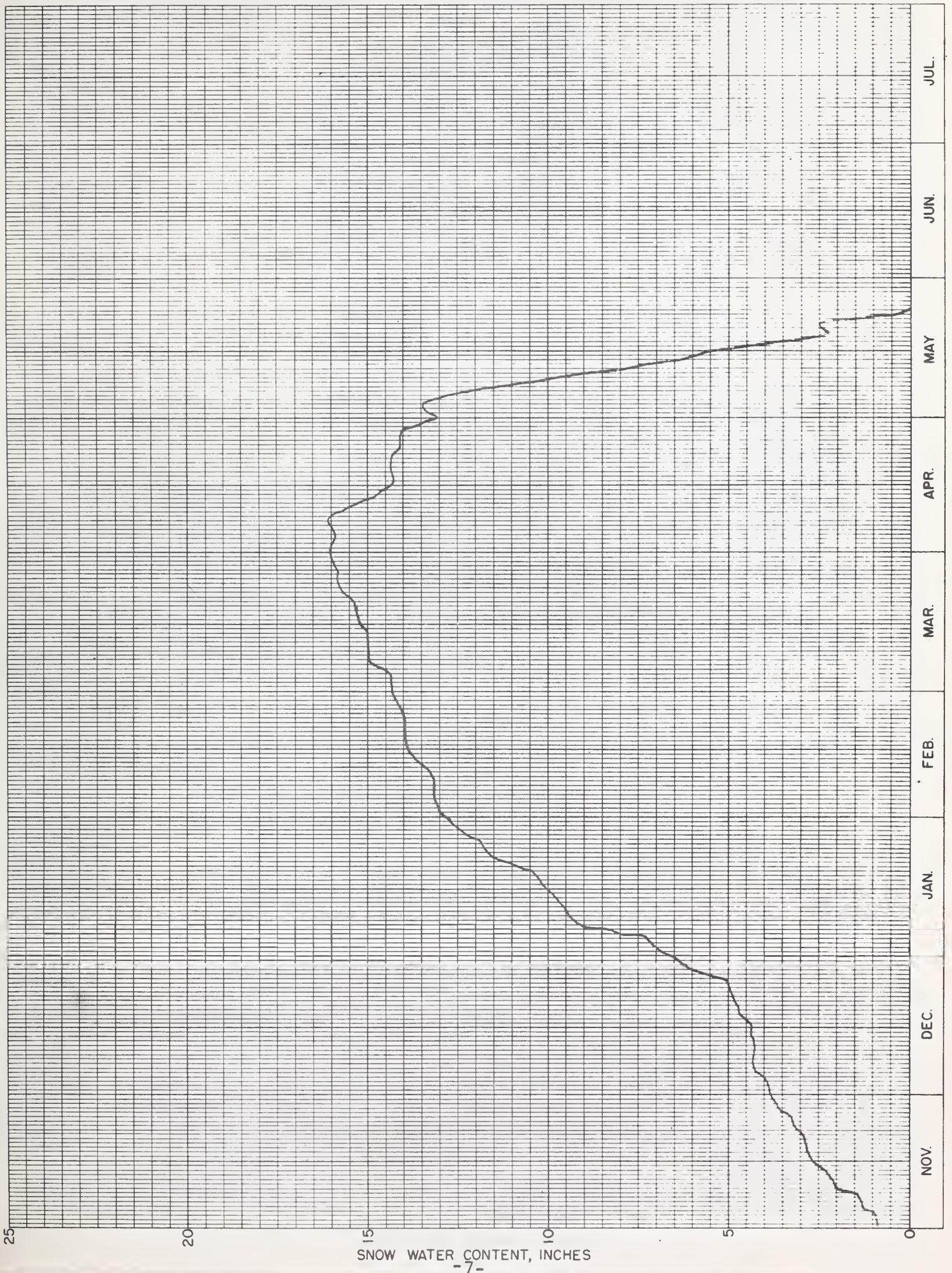
SNOW PILLOW DATA  
WATER YEAR 1969

BLACK PINE

No. 13C13

Elev. 7100

Drainage: Clark Fork



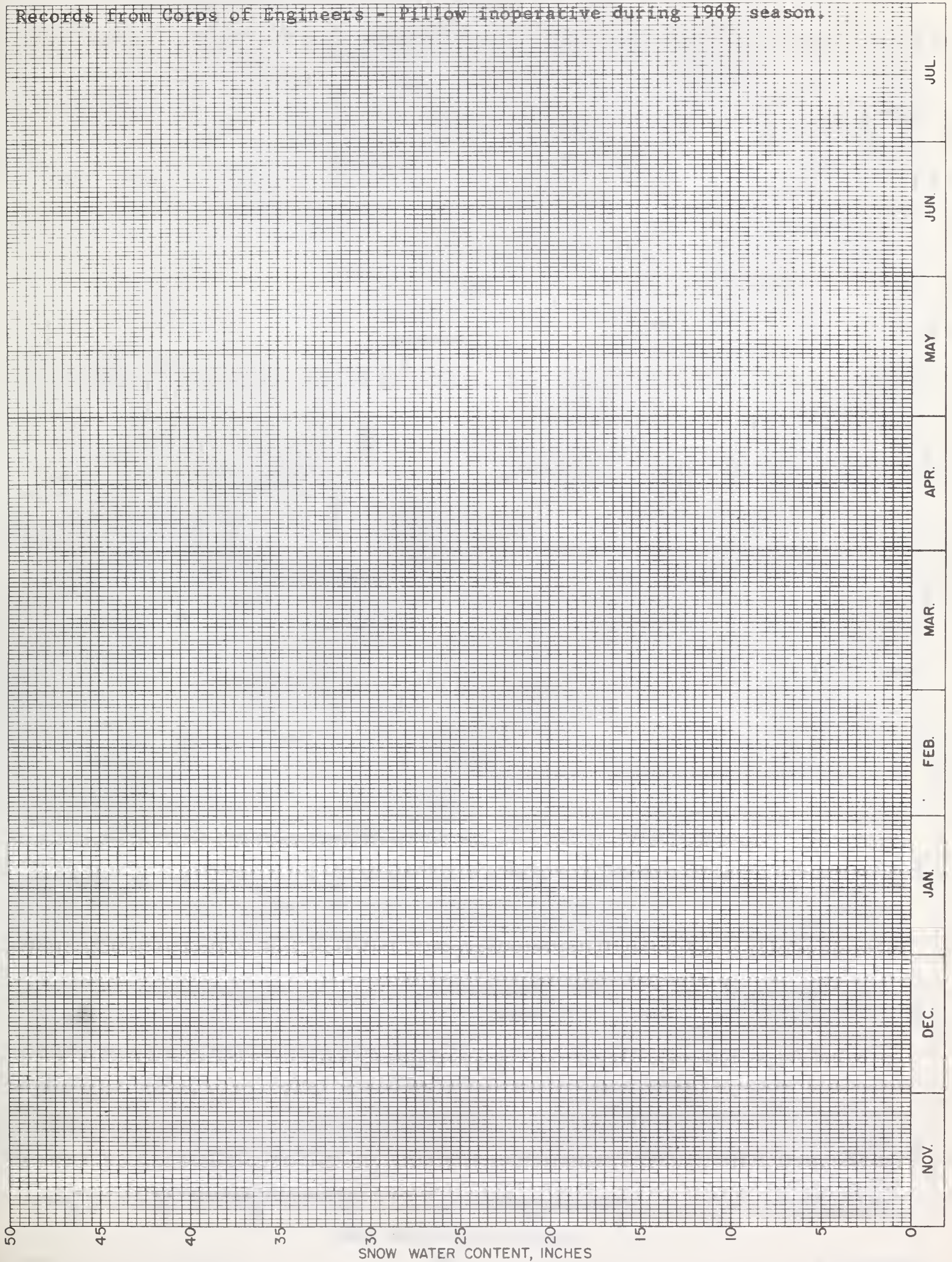


SNOW PILLOW DATA  
WATER YEAR 1969

HOODOO BASIN

No. 15C10 Elev. 6000 Drainage: Clark Fork

Records from Corps of Engineers - Pillow inoperative during 1969 season.



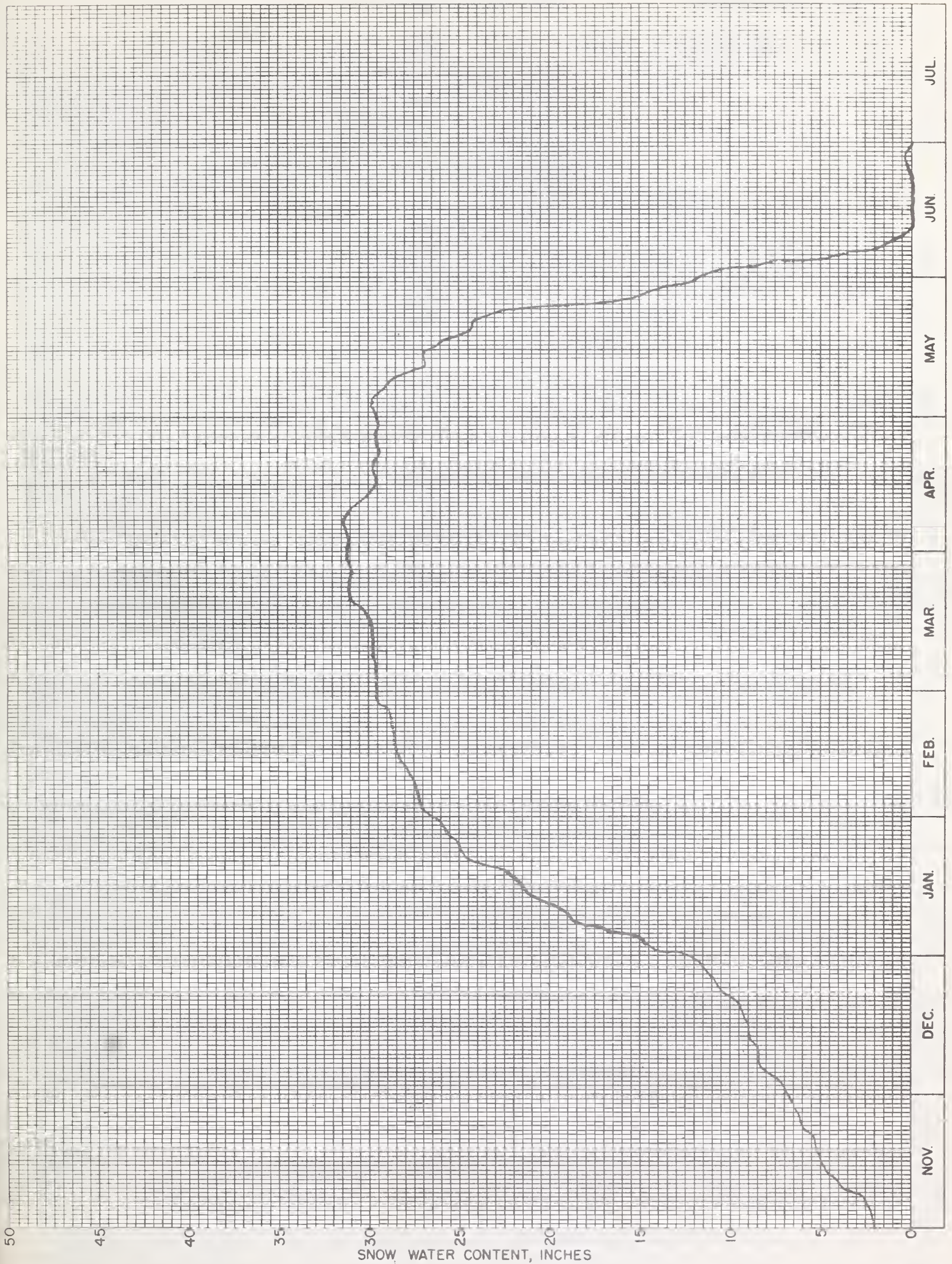
THE NEW YORK PUBLIC LIBRARY

ASTOR LENOX TILDEN FOUNDATION

No. 13D22

Elev. 7900

Drainage: Bitterroot



SNOW WATER CONTENT, INCHES



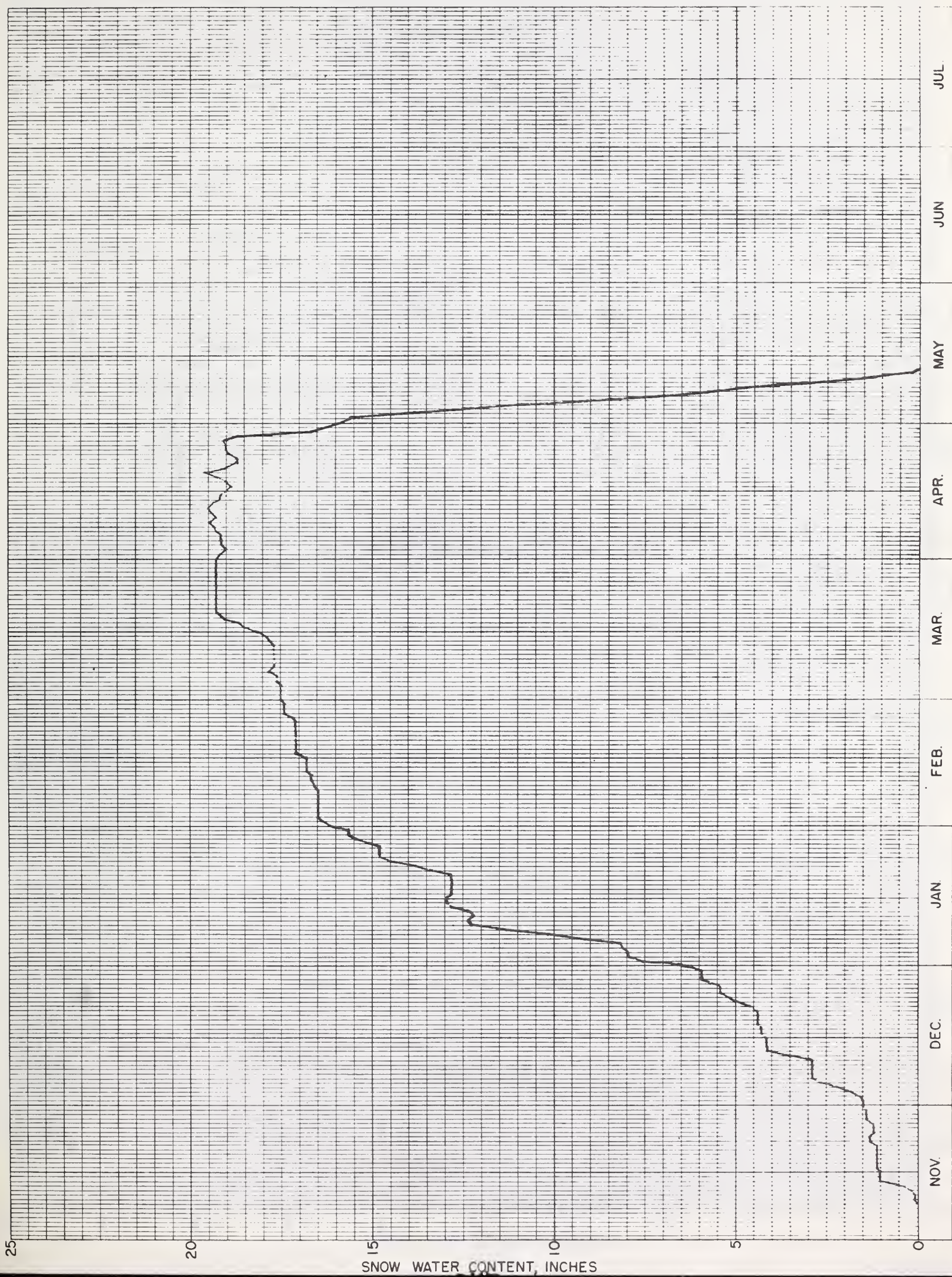
SNOW PILLOW DATA  
WATER YEAR 1969

TWELVEMILE CREEK

No. 14C13

Elev. 5600

Drainage: Bitterroot





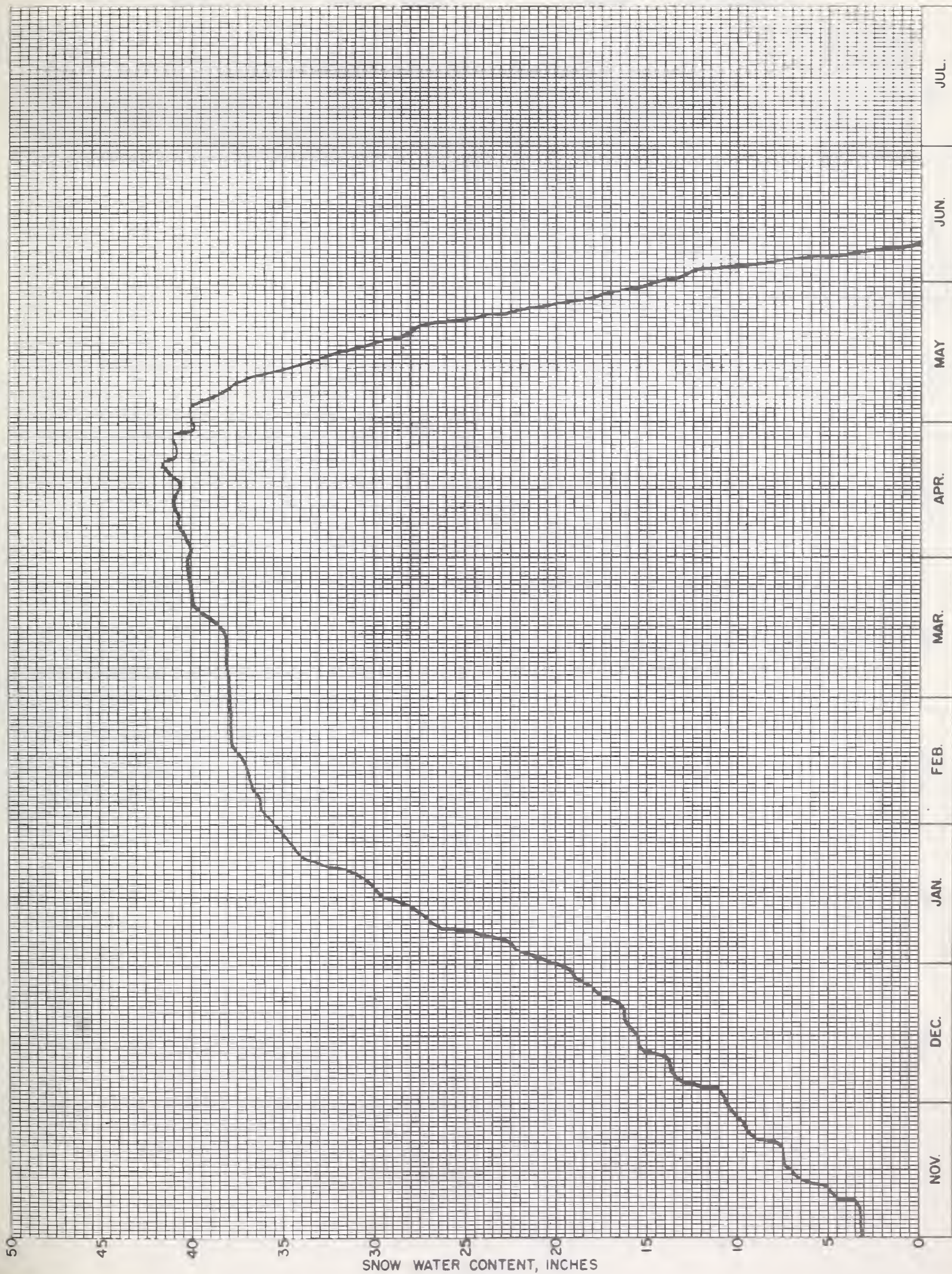
SNOW PILLOW DATA  
WATER YEAR 1969

TWIN LAKES

No. 14C12

Elev. 6400

Drainage: Bitterroot





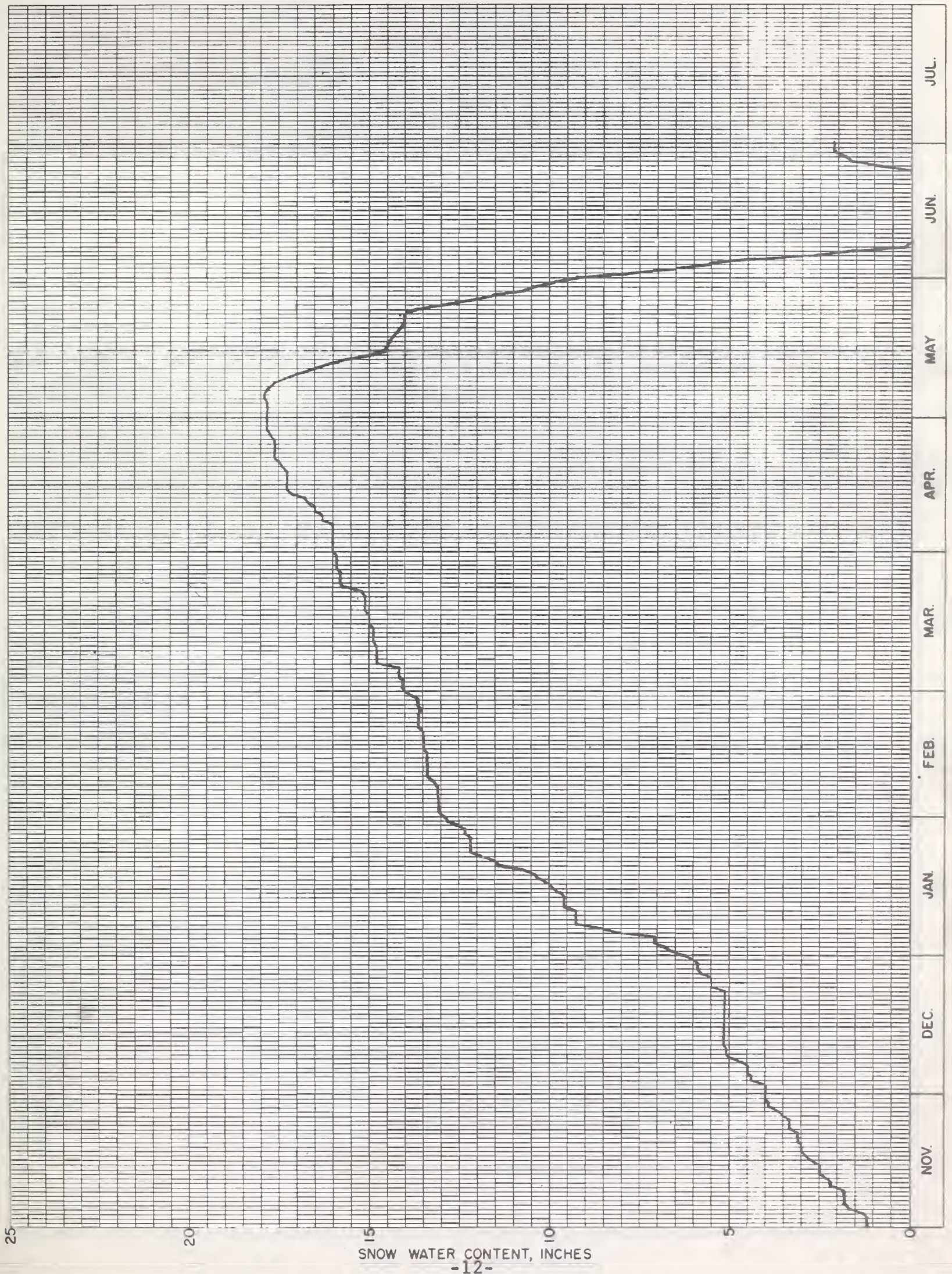
SNOW PILLOW DATA  
WATER YEAR 1969

ROCKER PEAK

No. 12C11

Elev. 8000

Drainage: Jefferson





SNOW PILLOW DATA  
WATER YEAR 1969

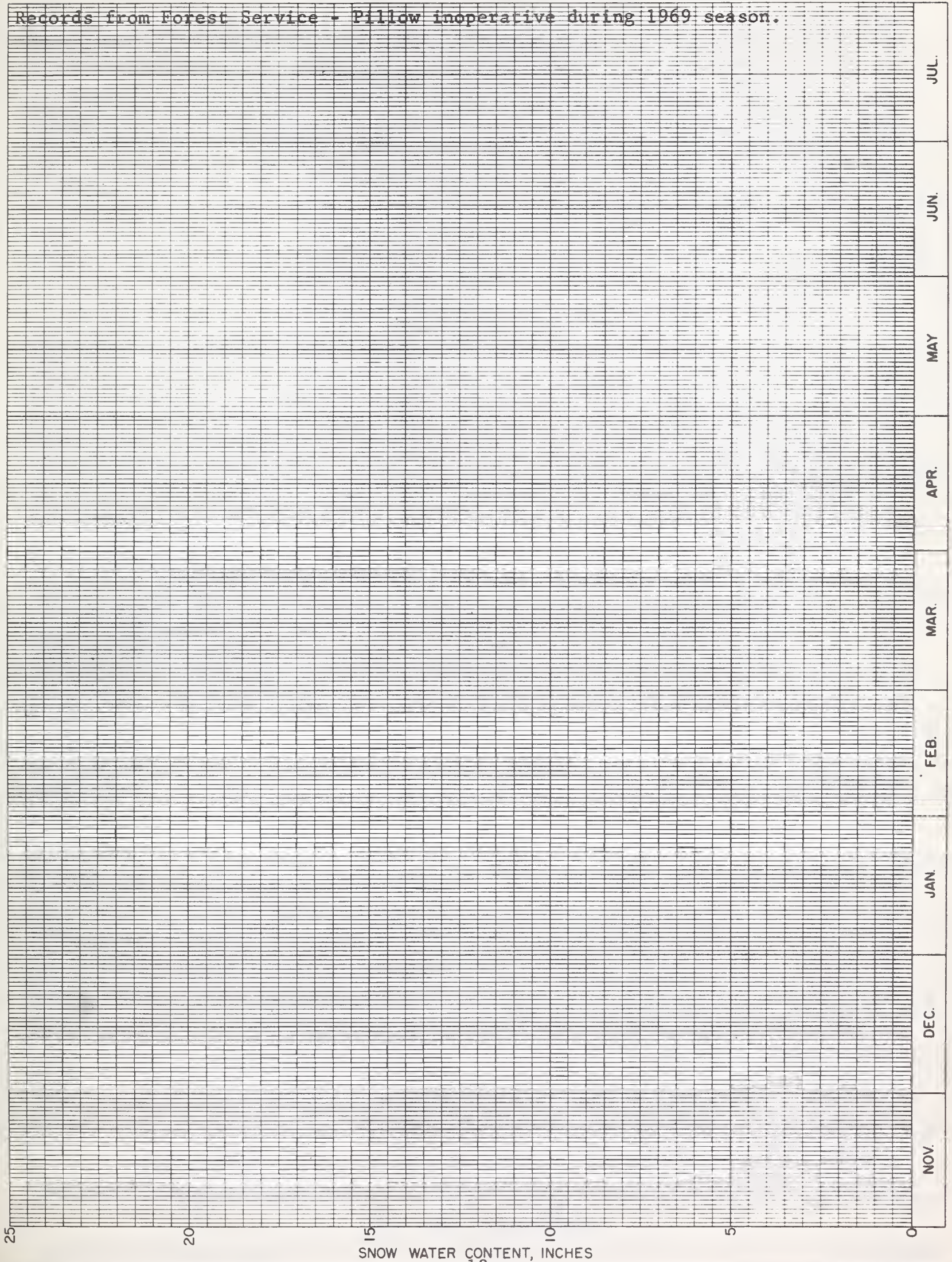
LION MOUNTAIN

No. 11E28

Elev. 8760

Drainage: Madison

Records from Forest Service - Pillow inoperative during 1969 season.





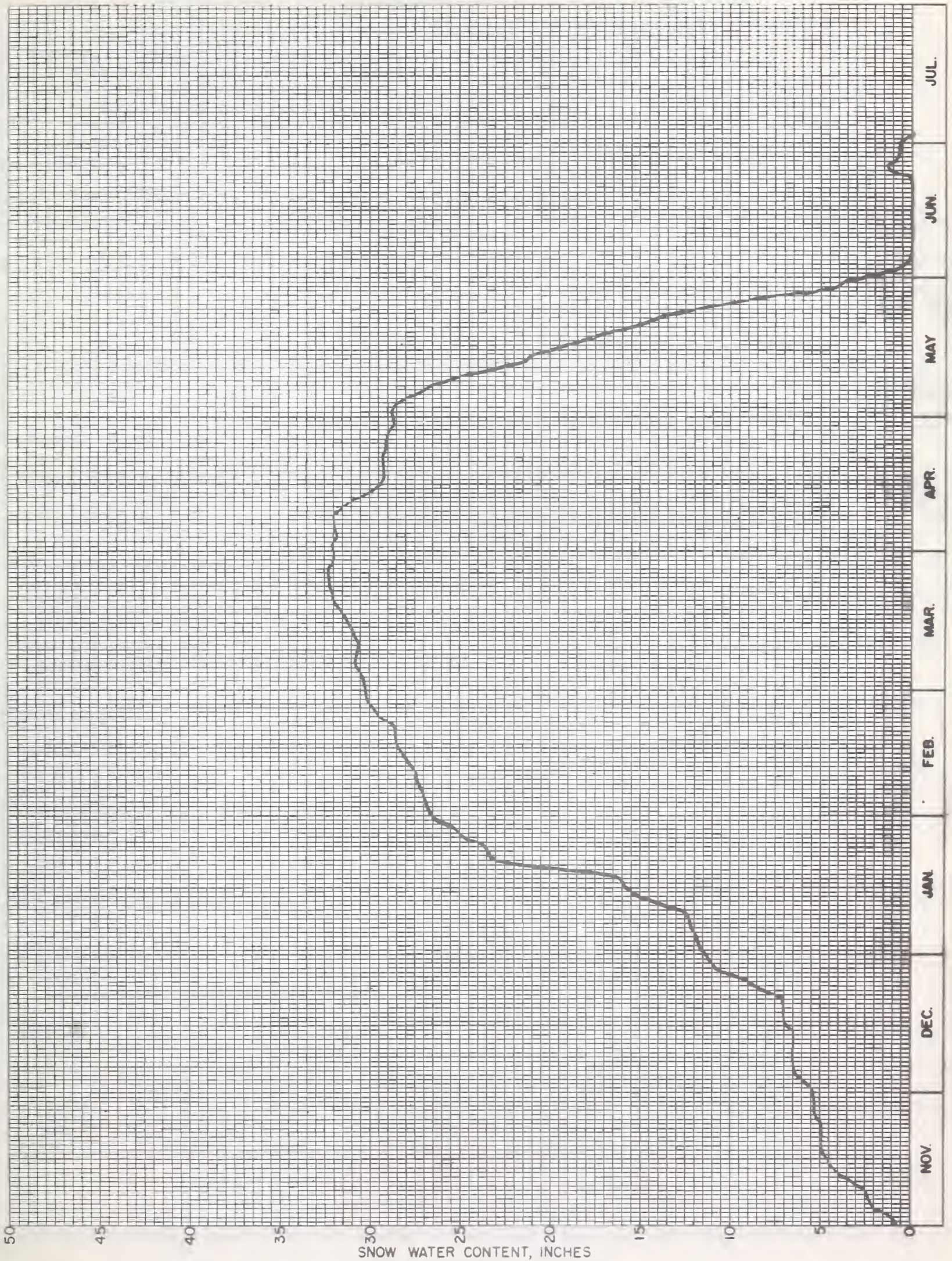
SNOW PILLOW DATA  
WATER YEAR 1969

MADISON PLATEAU

No. 11E31

Elev. 7750

Drainage: Madison





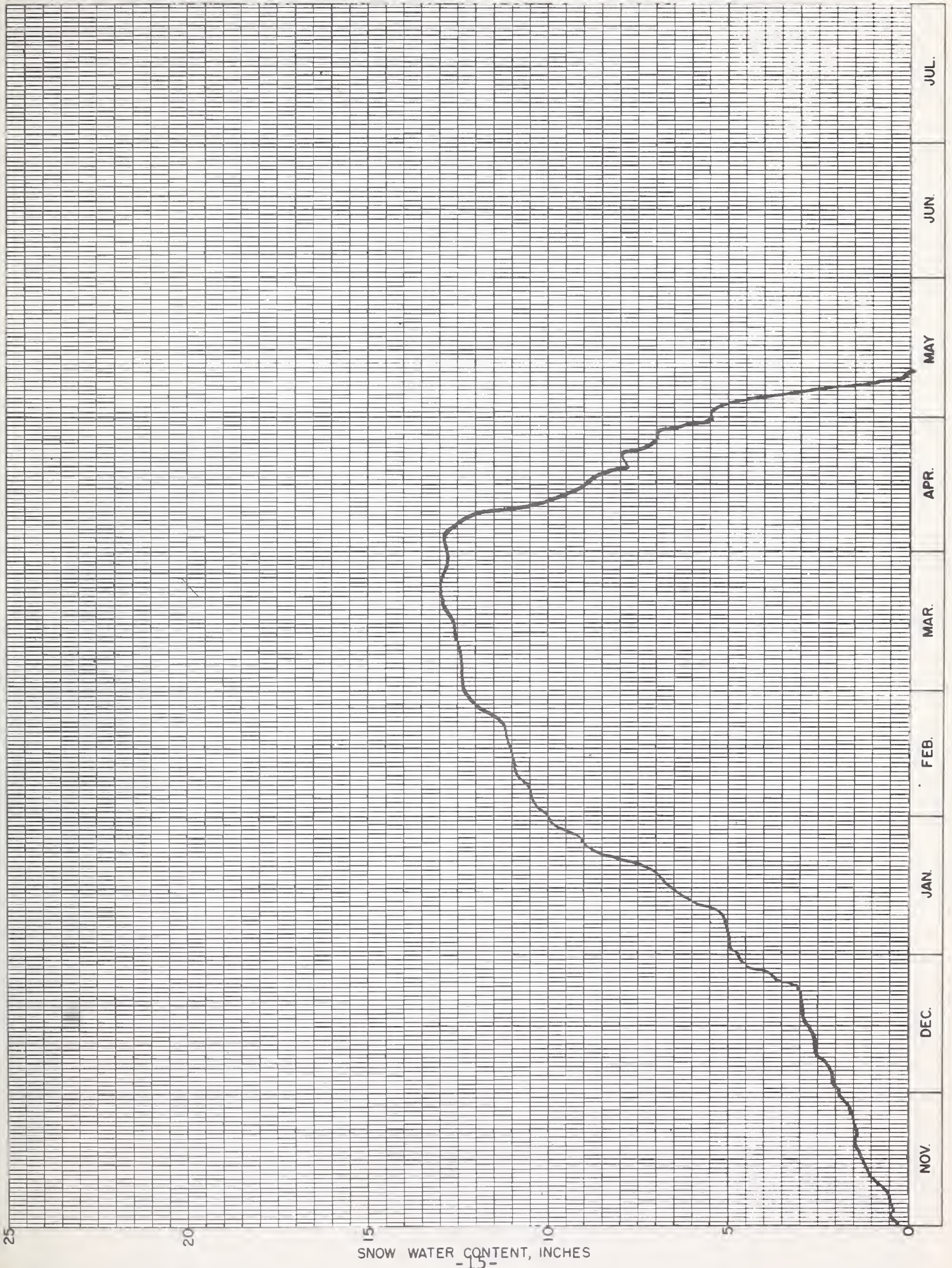
SNOW PILLOW DATA  
WATER YEAR 1969

WEST YELLOWSTONE

No. 11E07

Elev. 6700

Drainage: Madison





SNOW PILLOW DATA  
WATER YEAR 1969

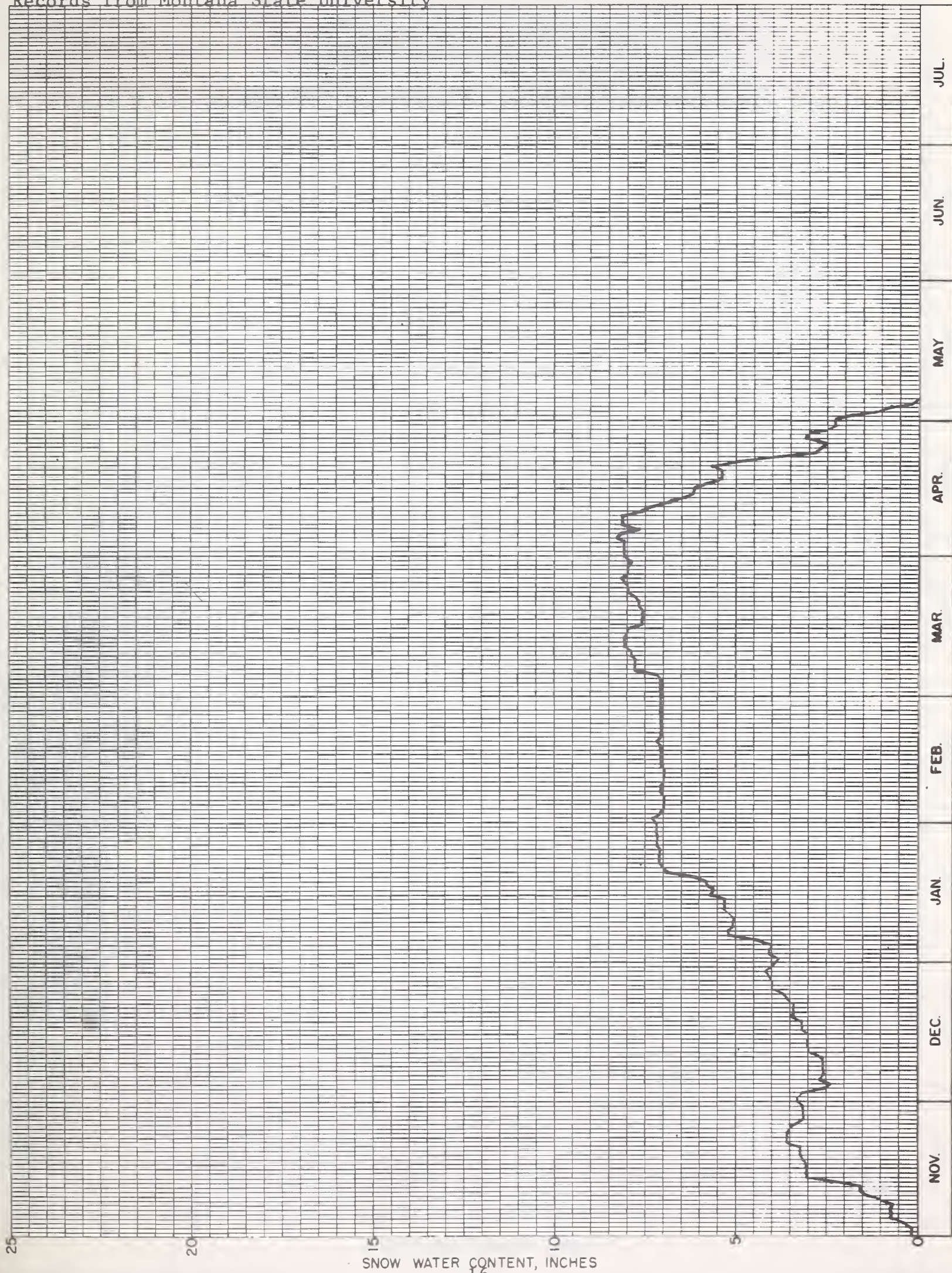
BANGTAIL

No. 10D20

Elev. 7900

Drainage: Gallatin

Records from Montana State University



SNOW WATER CONTENT, INCHES



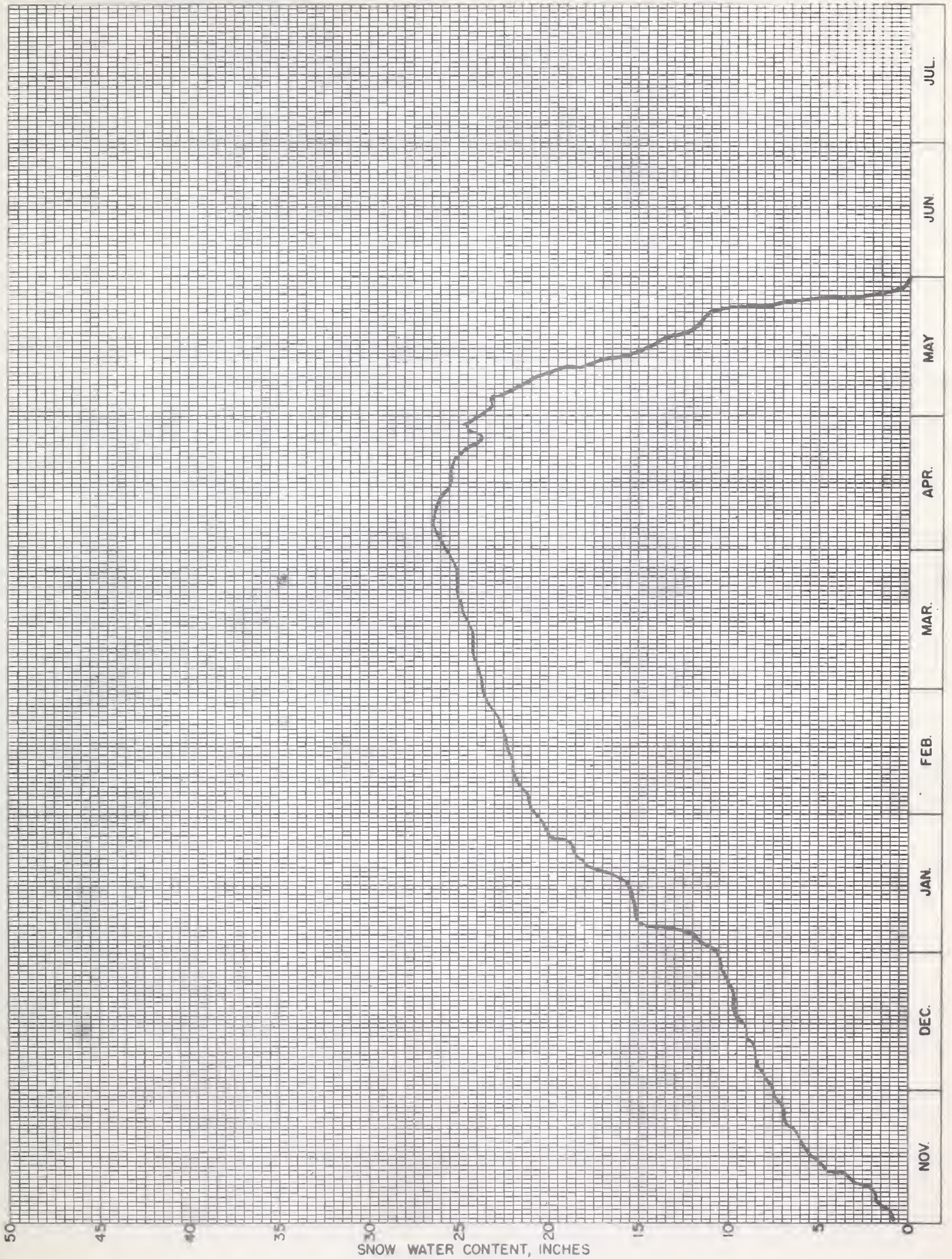
SNOW PILLOW DATA  
WATER YEAR 1969

BRIDGER BOWL

No. 10D15

Elev. 7250

Drainage: Gallatin





SNOW PILLOW DATA  
WATER YEAR 1969

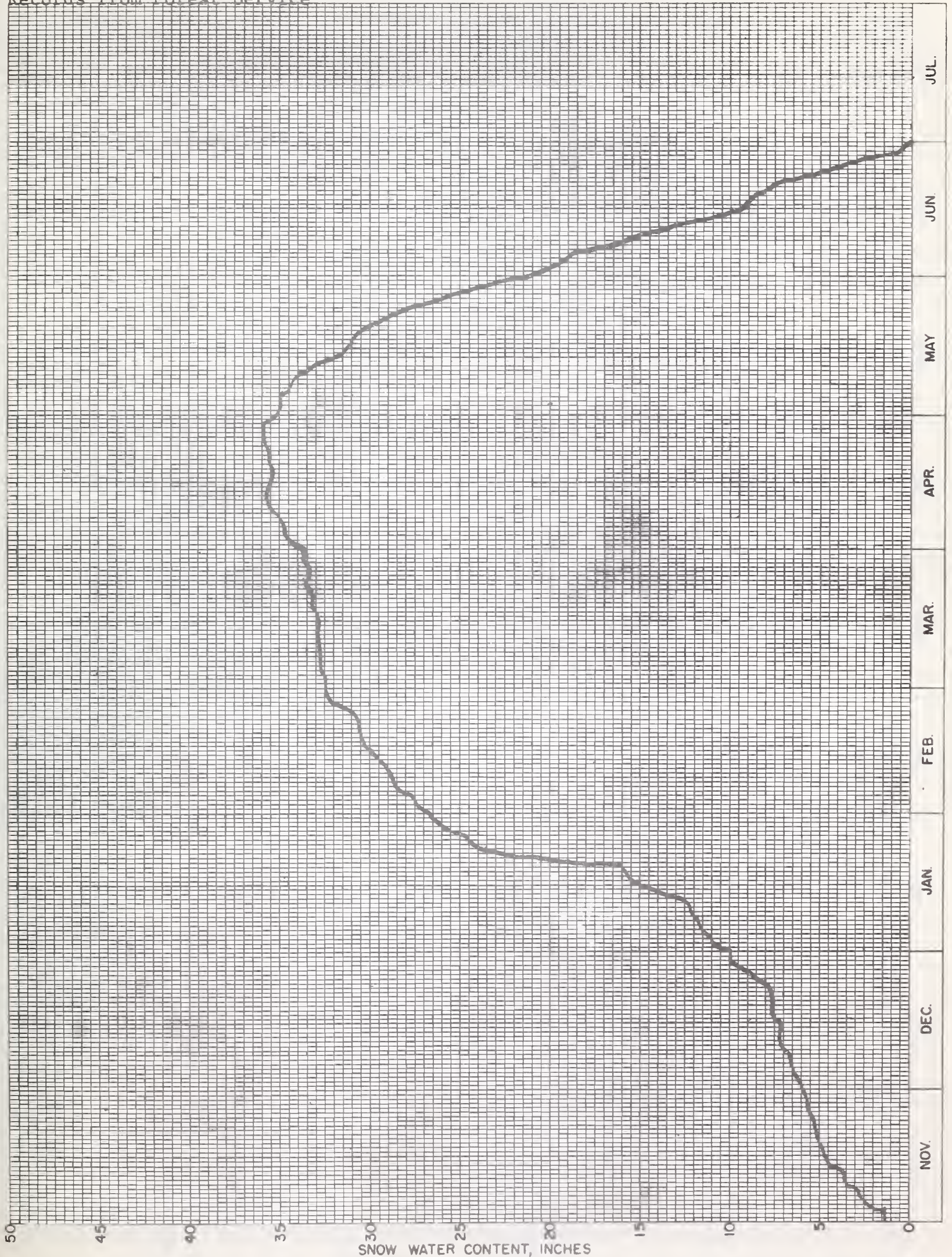
CARROT BASIN

No. 11E29

Elev. 9000

Drainage: Gallatin

Records from Forest Service





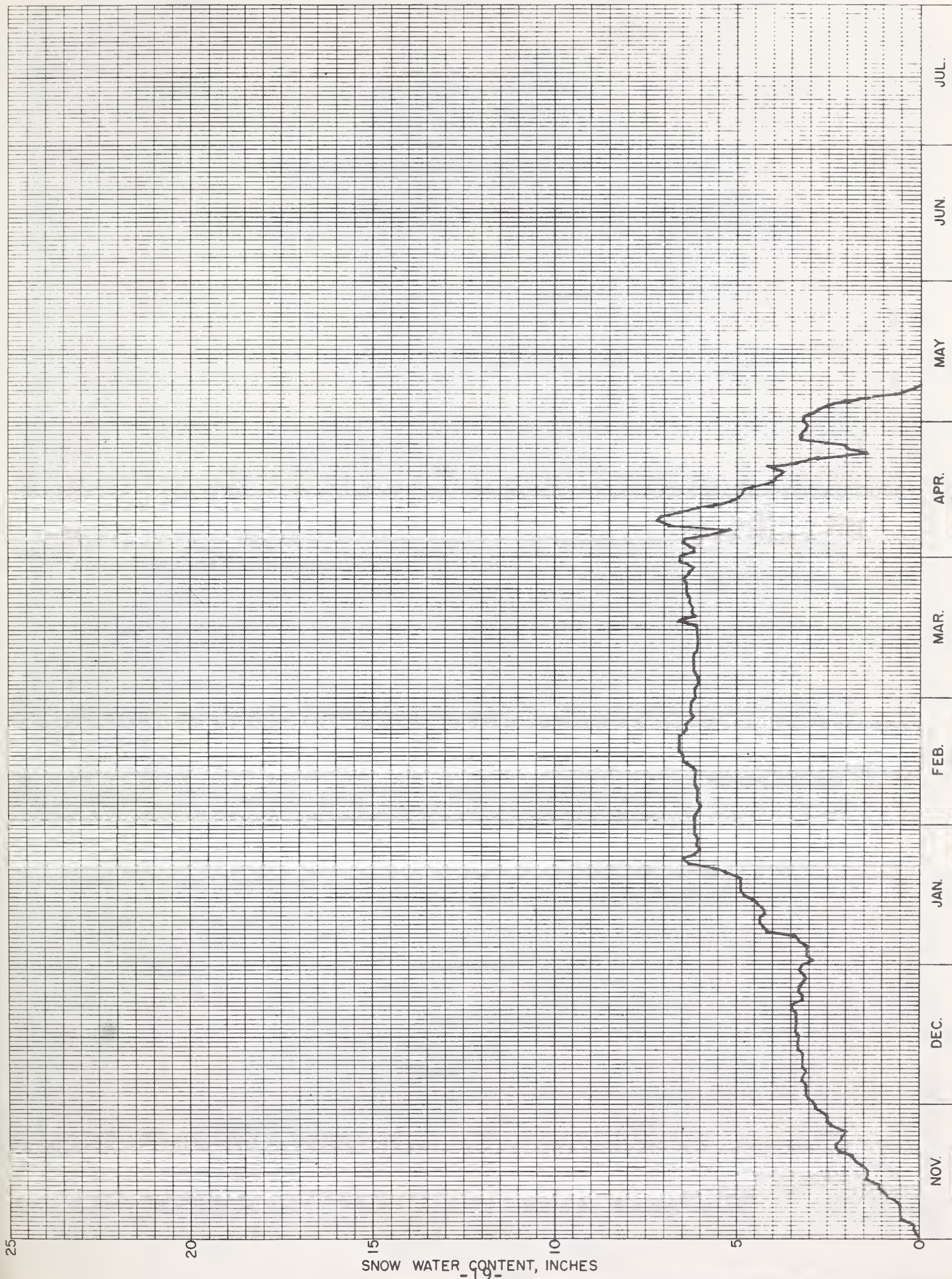
SNOW PILLOW DATA  
WATER YEAR 1969

LICK CREEK

No. 10D13

Elev. 6860

Drainage: Gallatin



SNOW WATER CONTENT, INCHES



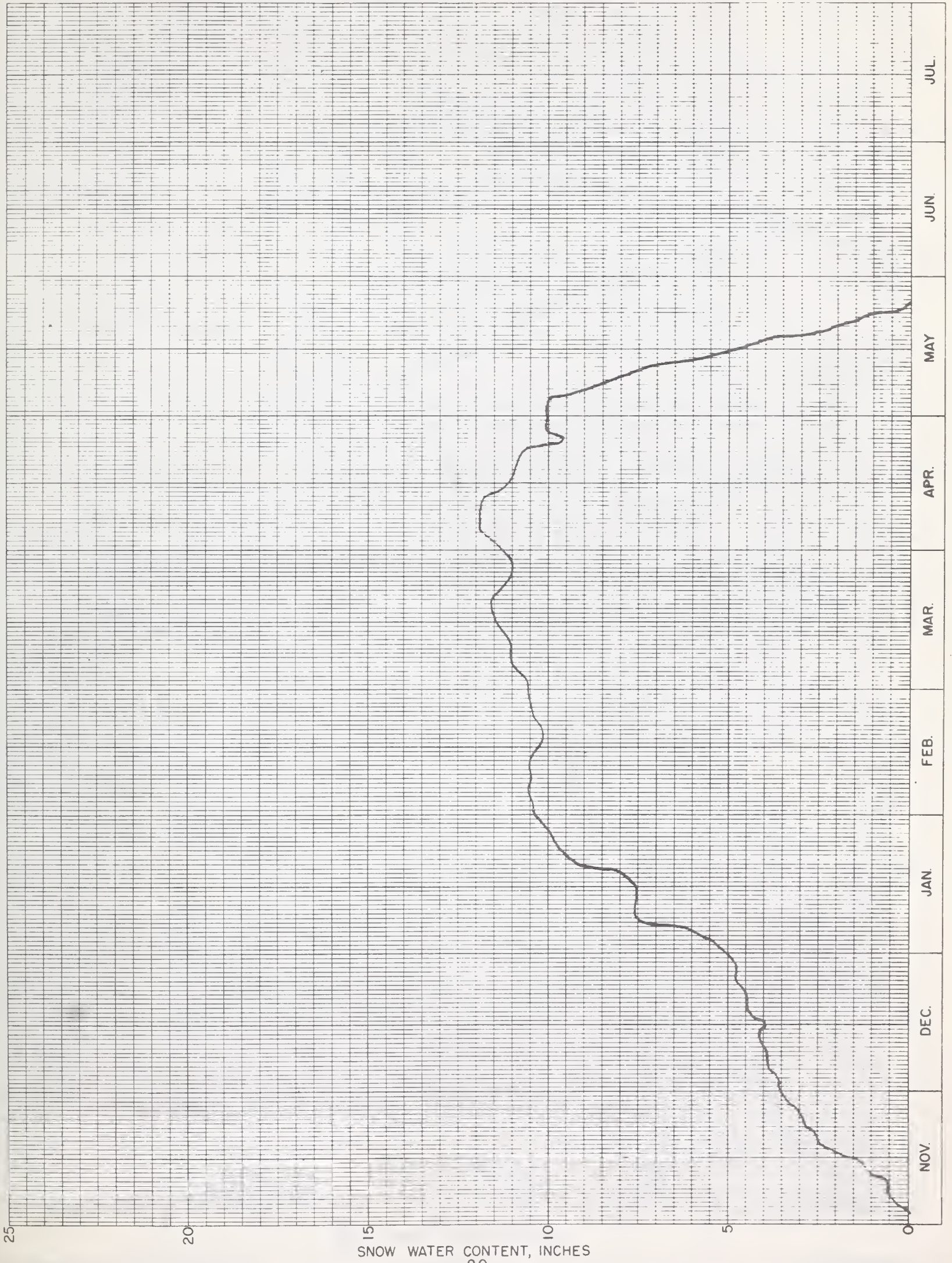
SNOW PILLOW DATA  
WATER YEAR 1969

MAYNARD CREEK

No. 10D18

Elev. 6210

Drainage: Gallatin

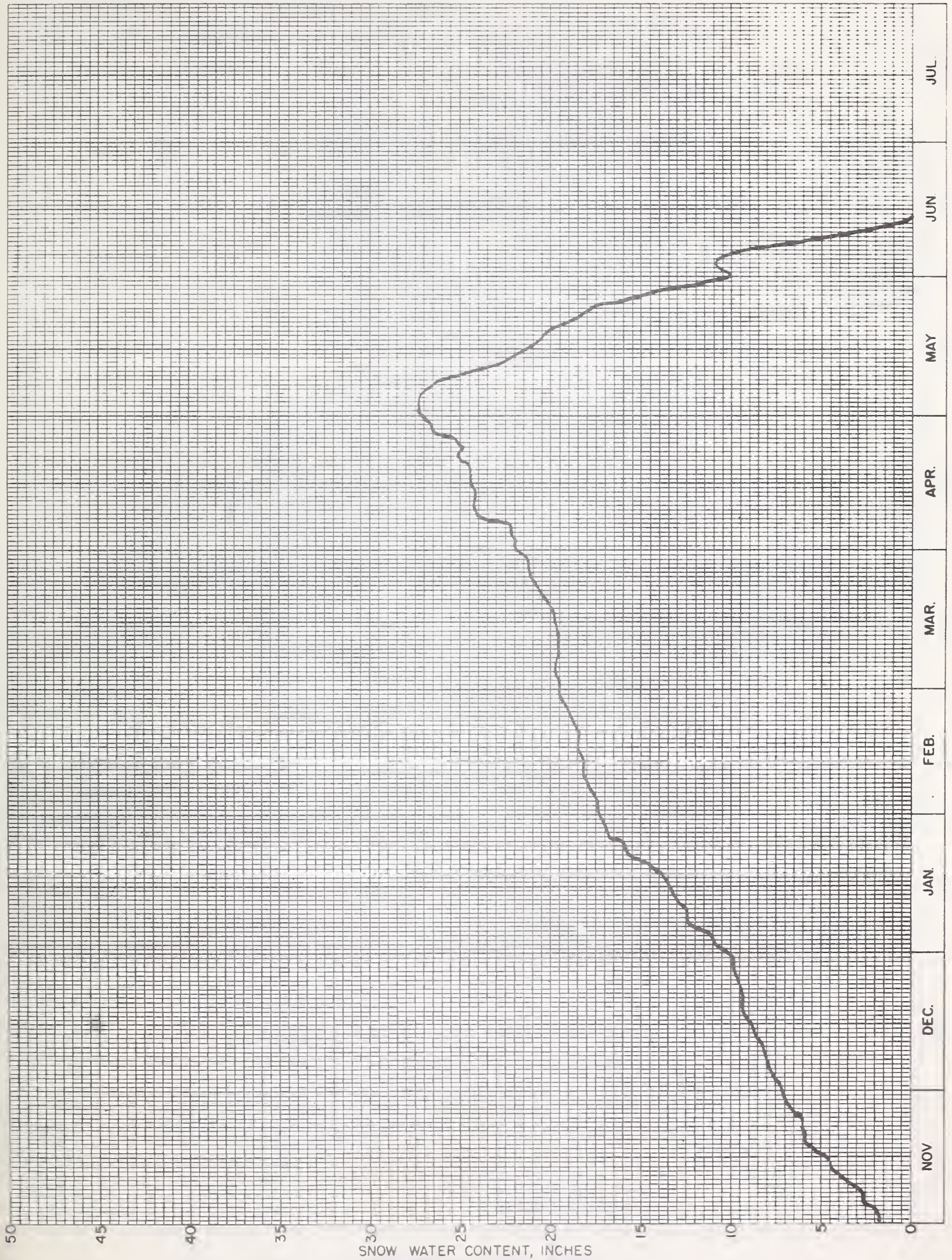




SNOW PILLOW DATA  
WATER YEAR 1969

SHOWER FALLS

No. 10D16 Elev. 8100 Drainage: Gallatin

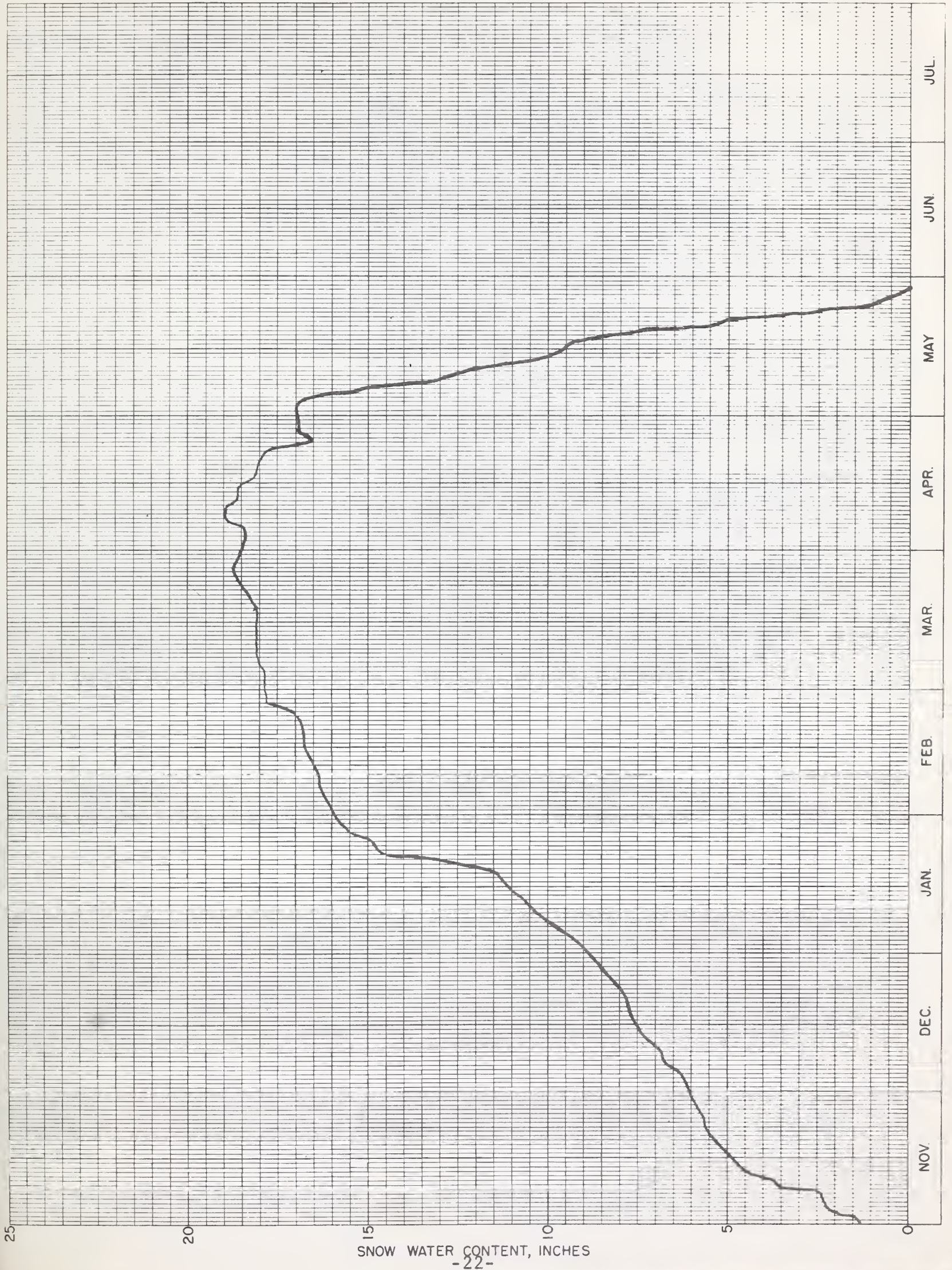




SNOW PILLOW DATA  
WATER YEAR 1969

TAYLOR PEAKS

No. 11D13 Elev. 8500 Drainage: Gallatin





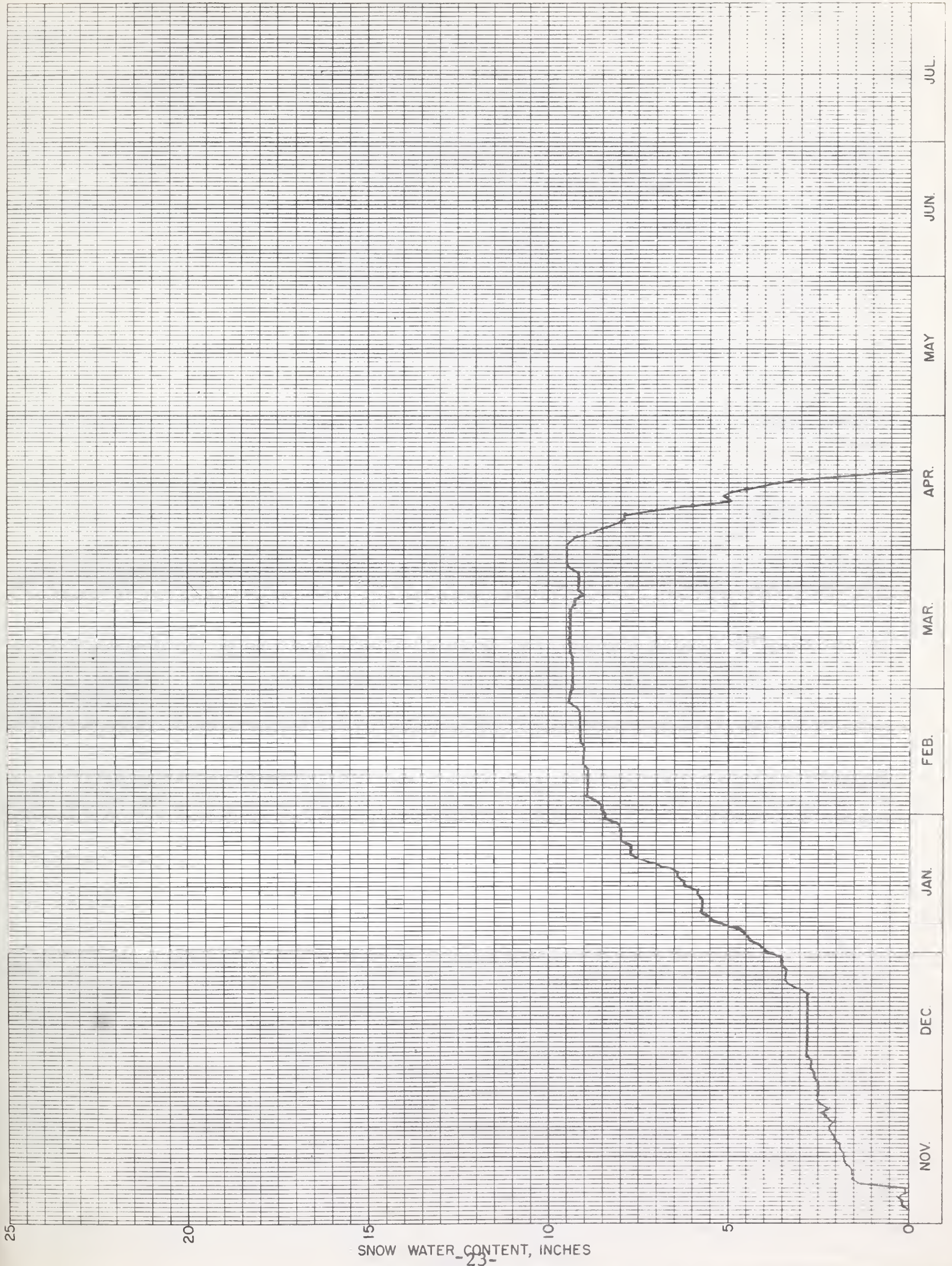
SNOW PILLOW DATA  
WATER YEAR 1969

DEADMAN CREEK

No. 10C09

Elev. 6450

Drainage: Jefferson

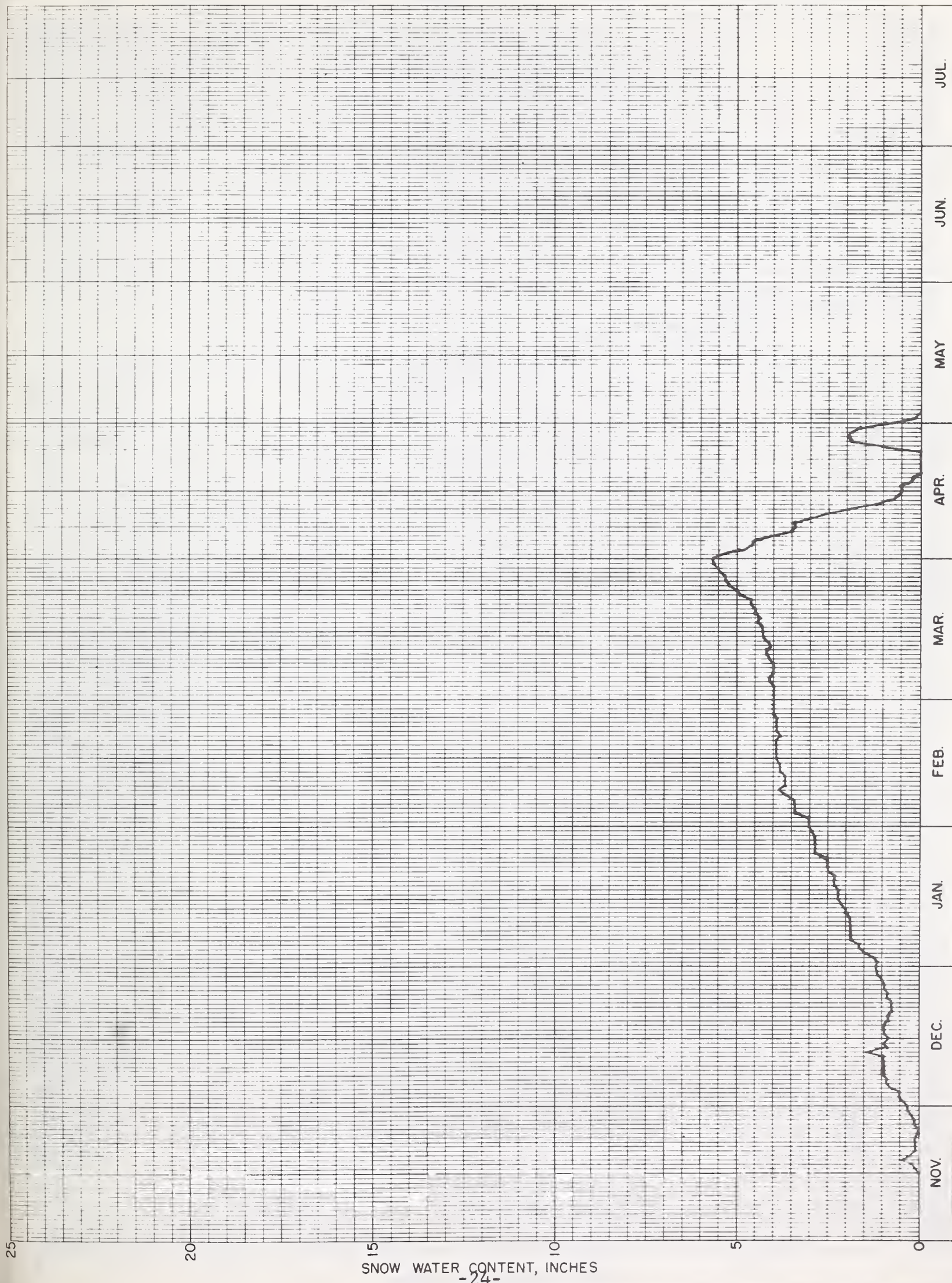




SNOW PILLOW DATA  
WATER YEAR 1969

ROCKY BOY

No. 9A01 Elev. 4700 Drainage: Milk





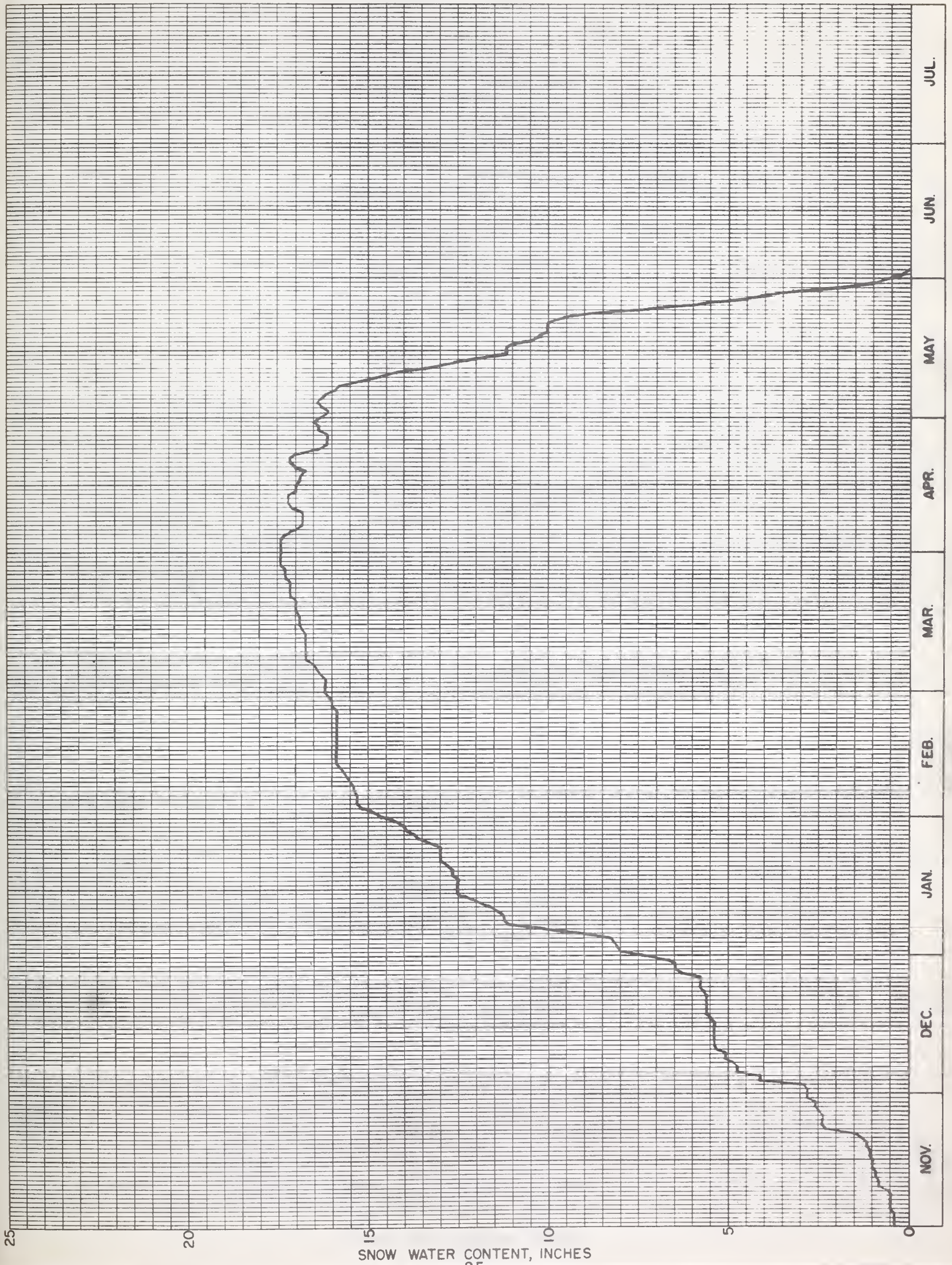
SNOW PILLOW DATA  
WATER YEAR 1969

MOUNT LOCKHART

No. 12B12

Elev. 6400

Drainage: Sun-Teton-Marias

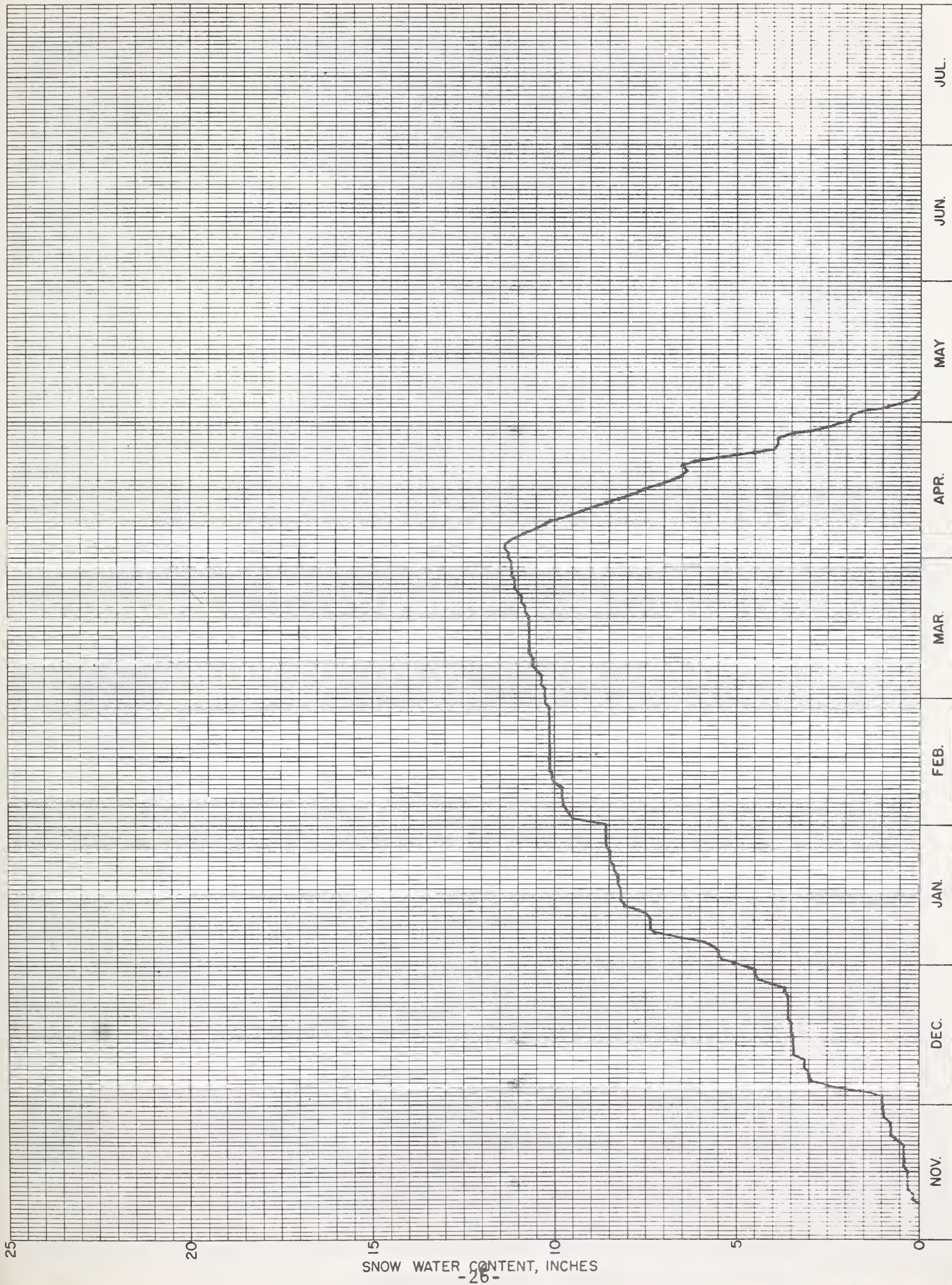




SNOW PILLOW DATA  
WATER YEAR 1969

WALDRON

No. 12B13 Elev. 5600 Drainage: Sun-Marias-Teton





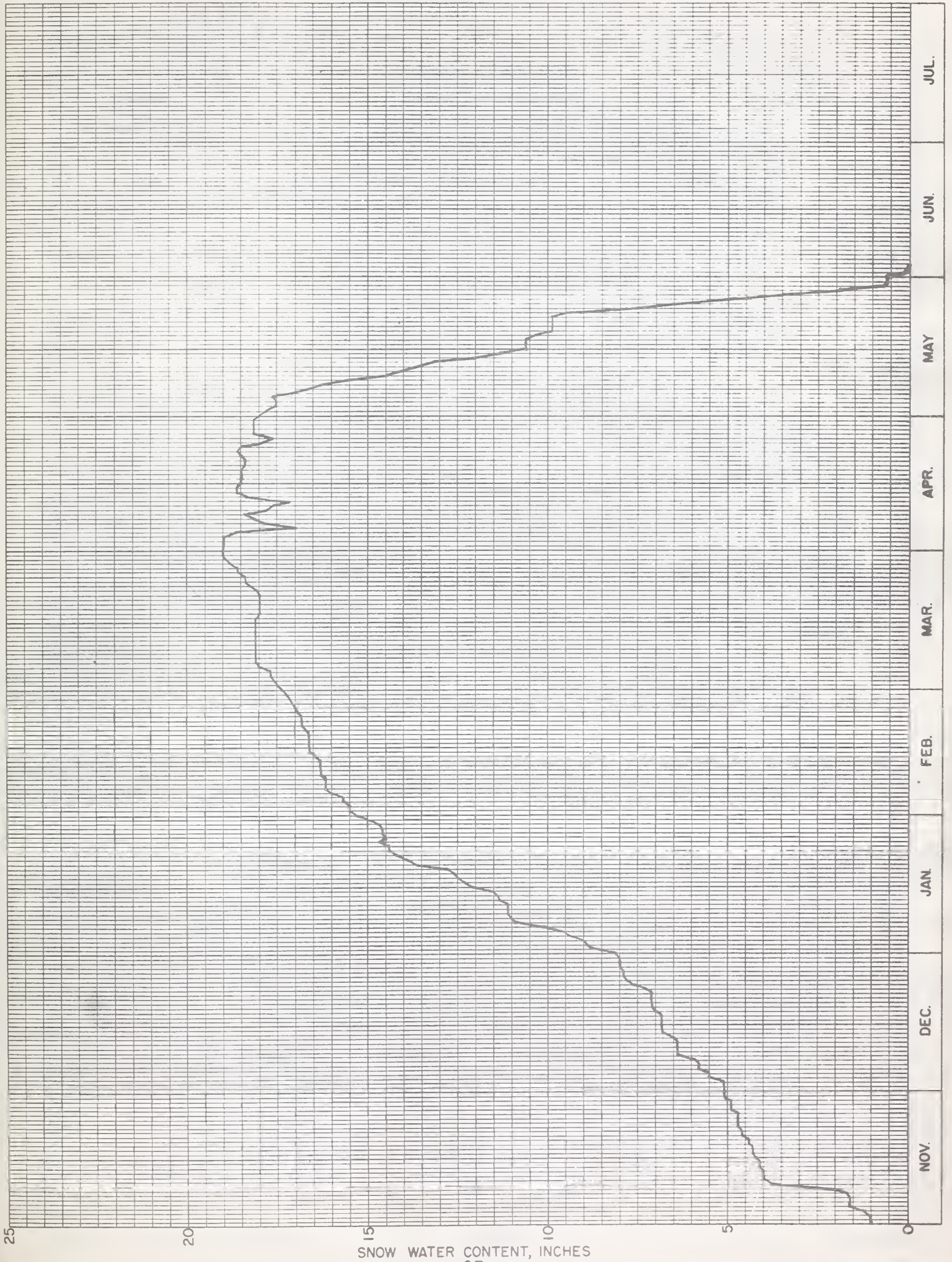
SNOW PILLOW DATA  
WATER YEAR 1969

SPUR PARK

No. 10C06

Elev. 8000

Drainage: Judith

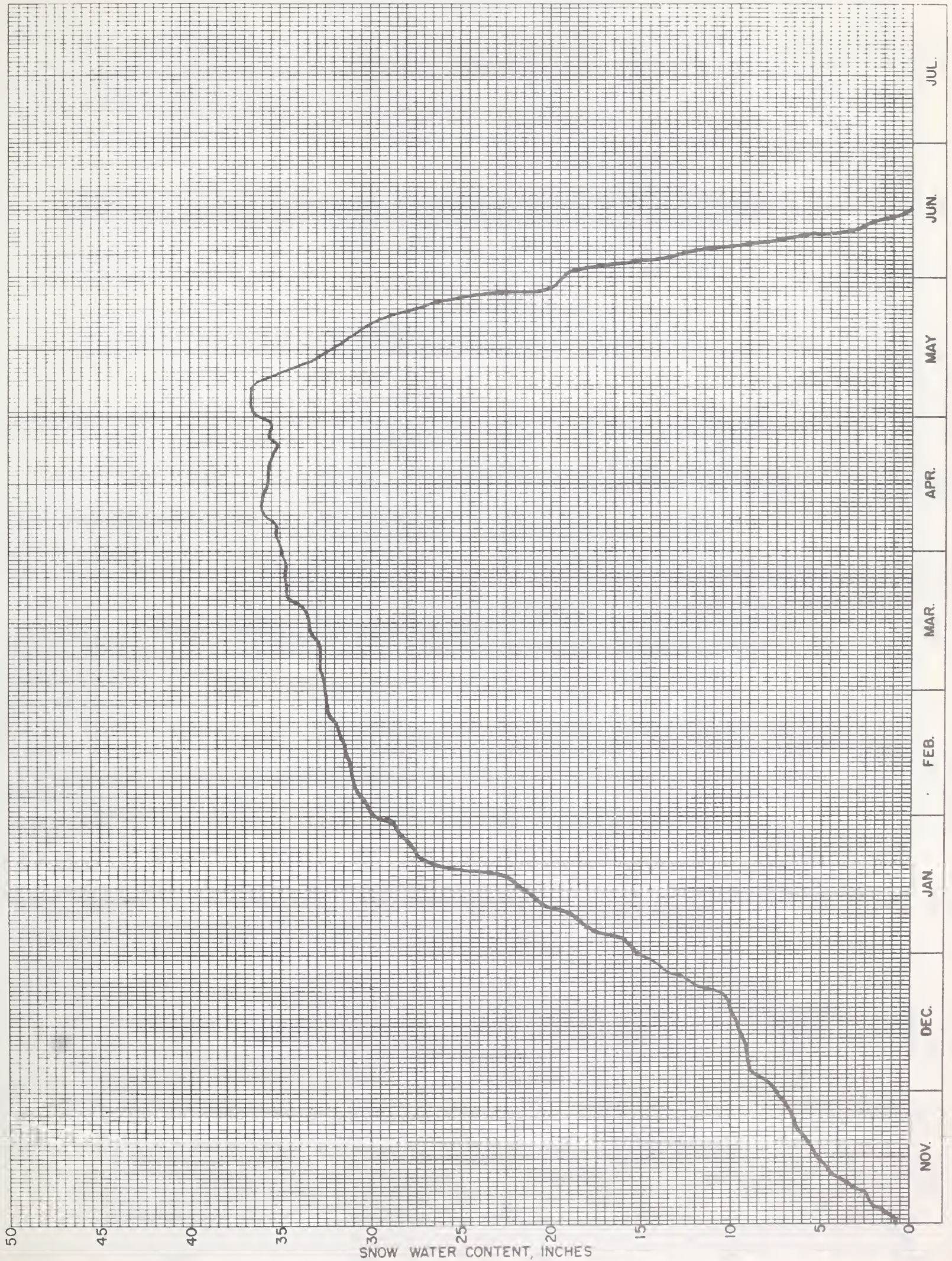




SNOW PILLOW DATA  
WATER YEAR 1969

FISHER CREEK

No. 9D06 Elev. 9100 Drainage: Yellowstone

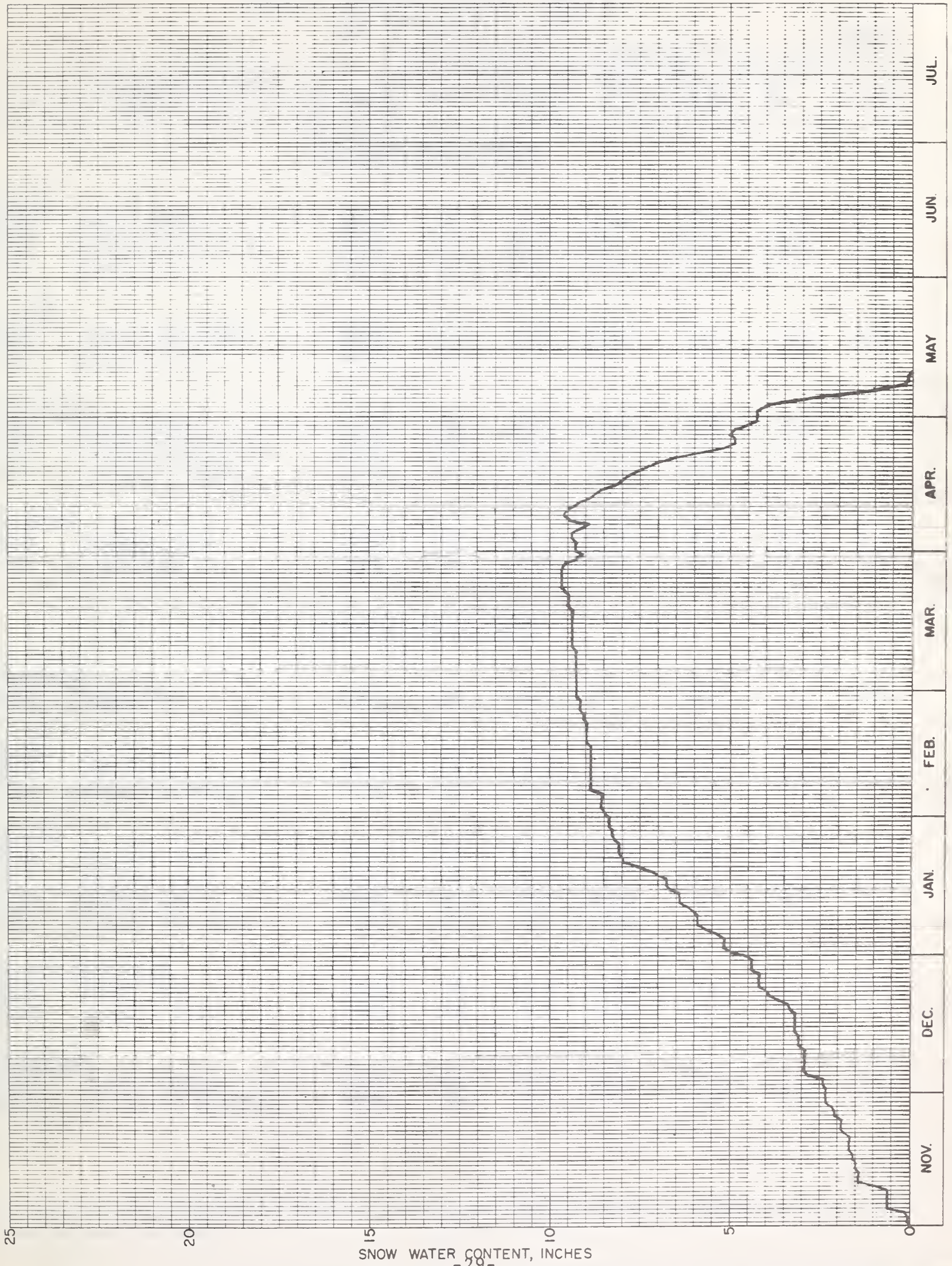




SNOW PILLOW DATA  
WATER YEAR 1969

NORTHEAST ENTRANCE

No. 10D07 Elev. 7350 Drainage: Yellowstone





# SOIL MOISTURE DATA

AS OF JULY 1, 1969

(Inches)

| SOIL MOISTURE STATION |      |           | SOIL PROFILE |                | CURRENT DATA   |               | PAST RECORD |           |
|-----------------------|------|-----------|--------------|----------------|----------------|---------------|-------------|-----------|
| NO.                   | NAME | ELEVATION | DEPTH        | FIELD CAPACITY | DATE OF SURVEY | SOIL MOISTURE | LAST YEAR   | **AVERAGE |

## COLUMBIA RIVER BASIN

### Kootenai

|        |                   |      |    |      |      |      |      |   |
|--------|-------------------|------|----|------|------|------|------|---|
| 15B15M | Baree Trail       | 3800 | 48 | 7.5  | 7/14 | 5.7  | 5.5  | - |
| 14A10M | Murphy Lake R. S. | 3000 | 48 | 22.6 | 7/1  | 22.6 | 21.0 | - |
| 15A02M | Raven R. S.       | 3050 | 48 | 23.0 | 7/14 | 15.7 | 18.7 | - |

### Flathead

|        |                 |      |    |     |      |     |     |     |
|--------|-----------------|------|----|-----|------|-----|-----|-----|
| 13A02M | Desert Mountain | 5600 | 54 | 8.4 | 6/30 | 9.3 | 9.2 | 8.3 |
| 13A05M | Marias Pass     | 5250 | 54 | 6.5 | 7/1  | 5.9 | 5.4 | 5.2 |

### Clark Fork

|        |                   |      |    |      |      |      |      |   |
|--------|-------------------|------|----|------|------|------|------|---|
| 13C13M | Black Pine        | 7100 | 48 | 10.0 | 6/30 | 8.8  | 8.8  | - |
| 13B19M | Seeley Lake R. S. | 4030 | 48 | 11.9 |      |      | 9.1  | - |
| 13C03M | Skalkaho Summit   | 7260 | 48 | 10.8 | 6/30 | 10.4 | 10.1 | - |

### Bitterroot

|        |              |      |    |      |      |     |     |     |
|--------|--------------|------|----|------|------|-----|-----|-----|
| 13D18M | Gibbons Pass | 7100 | 48 | 7.1  | 6/30 | 6.6 | 6.6 | 6.4 |
| 14C05M | Lolo Pass    | 5250 | 48 | 10.6 | 6/27 | 9.0 | 9.3 | 9.6 |

## MISSOURI RIVER BASIN

### Beaverhead

|        |          |      |    |      |     |      |     |      |
|--------|----------|------|----|------|-----|------|-----|------|
| 11E13M | Lakeview | 6700 | 48 | 15.3 | 7/1 | 10.2 | 7.5 | 13.2 |
|--------|----------|------|----|------|-----|------|-----|------|

### Madison

|        |                  |      |    |     |      |     |     |     |
|--------|------------------|------|----|-----|------|-----|-----|-----|
| 11D04M | Red Bluff        | 4800 | 40 | 4.7 |      |     | -   | 1.3 |
| 11E07M | West Yellowstone | 6700 | 48 | 6.5 | 6/28 | 2.8 | 2.6 | -   |

### Gallatin

|        |                 |      |    |      |      |      |      |      |
|--------|-----------------|------|----|------|------|------|------|------|
| 10D15M | Bridger Bowl    | 7250 | 48 | 17.0 | 6/30 | 16.7 | 16.8 | -    |
| 11D02M | College Site    | 4856 | 54 | 14.5 | 7/3  | 15.1 | 14.8 | 11.2 |
| 10D13M | Lick Creek      | 6860 | 48 | 18.8 | 6/30 | 16.9 | 18.1 | -    |
| 11E06M | Twenty-One Mile | 7150 | 48 | 10.0 | 6/28 | 9.3  | 7.9  | 8.4  |

### Missouri Main Stem

|        |              |      |    |      |      |      |      |      |
|--------|--------------|------|----|------|------|------|------|------|
| 10C01M | Kings Hill   | 7420 | 48 | 11.8 | 6/30 | 10.8 | 10.8 | 10.8 |
| 12C08M | Stemple Pass | 6350 | 48 | 5.9  | 6/27 | 5.6  | 4.6  | 5.0  |

### Yellowstone

|        |                    |      |    |      |      |      |      |      |
|--------|--------------------|------|----|------|------|------|------|------|
| 10D11M | Battle Ridge       | 6020 | 48 | 17.6 | 6/30 | 16.1 | 16.5 | 15.0 |
| 10D07M | Northeast Entrance | 7350 | 48 | 9.4  | 7/1  | 10.4 | 8.8  | 9.1  |

\*\*AVERAGE FOR PERIOD OF RECORD



# SOIL MOISTURE DATA

AS OF AUGUST 1, 1969

(Inches)

| SOIL MOISTURE STATION |      |           | SOIL PROFILE |                | CURRENT DATA   |               | PAST RECORD |           |
|-----------------------|------|-----------|--------------|----------------|----------------|---------------|-------------|-----------|
| NO.                   | NAME | ELEVATION | DEPTH        | FIELD CAPACITY | DATE OF SURVEY | SOIL MOISTURE | LAST YEAR   | **AVERAGE |

## COLUMBIA RIVER BASIN

### Kootenai

|        |                   |      |    |      |      |      |      |   |
|--------|-------------------|------|----|------|------|------|------|---|
| 15B15M | Baree Trail       | 3800 | 48 | 7.5  | 8/10 | 3.1  | 3.3  | - |
| 14A10M | Murphy Lake R. S. | 3000 | 48 | 22.6 | 8/1  | 19.2 | 18.5 | - |
| 15A02M | Raven R. S.       | 3050 | 48 | 23.0 | 8/10 | 15.9 | 16.8 | - |

### Flathead

|        |                 |      |    |     |      |     |     |     |
|--------|-----------------|------|----|-----|------|-----|-----|-----|
| 13A02M | Desert Mountain | 5600 | 54 | 8.4 | 7/29 | 6.7 | 6.4 | 6.3 |
| 13A05M | Marias Pass     | 5250 | 54 | 6.5 | 8/1  | 4.3 | 4.1 | 3.8 |

### Clark Fork

|        |                   |      |    |      |      |     |      |   |
|--------|-------------------|------|----|------|------|-----|------|---|
| 13C13M | Black Pine        | 7100 | 48 | 10.0 | 7/31 | 8.5 | 8.6  | - |
| 13B19M | Seeley Lake R. S. | 4030 | 48 | 11.9 | 8/8  | 7.7 | -    | - |
| 13C03M | Skalkaho Summit   | 7260 | 48 | 10.8 | 7/31 | 9.4 | 10.5 | - |

### Bitterroot

|        |              |      |    |      |      |     |     |     |
|--------|--------------|------|----|------|------|-----|-----|-----|
| 13D18M | Gibbons Pass | 7100 | 48 | 7.1  | 7/28 | 4.9 | 4.3 | 4.6 |
| 14C05M | Lolo Pass    | 5250 | 48 | 10.6 | 7/31 | 4.9 | 5.4 | 6.0 |

## MISSOURI RIVER BASIN

### Beaverhead

|        |          |      |    |      |     |     |     |     |
|--------|----------|------|----|------|-----|-----|-----|-----|
| 11E13M | Lakeview | 6700 | 48 | 15.3 | 8/2 | 6.3 | 5.4 | 8.5 |
|--------|----------|------|----|------|-----|-----|-----|-----|

### Madison

|        |                  |      |    |     |  |  |     |     |
|--------|------------------|------|----|-----|--|--|-----|-----|
| 11D04M | Red Bluff        | 4800 | 40 | 4.7 |  |  | 1.3 | 1.3 |
| 11E07M | West Yellowstone | 6700 | 48 | 6.5 |  |  | 1.9 | -   |

### Gallatin

|        |                 |      |    |      |      |      |      |     |
|--------|-----------------|------|----|------|------|------|------|-----|
| 10D15M | Bridger Bowl    | 7250 | 48 | 17.0 | 7/30 | 14.8 | 15.6 | -   |
| 11D02M | College Site    | 4856 | 54 | 14.5 | 8/1  | 11.1 | 11.1 | 8.3 |
| 10D13M | Lick Creek      | 6860 | 48 | 18.8 | 7/31 | 16.0 | 11.6 | -   |
| 11E06M | Twenty-One Mile | 7150 | 48 | 10.0 |      |      | 4.1  | 5.1 |

### Missouri Main Stem

|        |              |      |    |      |      |     |     |     |
|--------|--------------|------|----|------|------|-----|-----|-----|
| 10C01M | Kings Hill   | 7420 | 48 | 11.8 | 8/1  | 9.4 | 9.4 | 9.2 |
| 12C08M | Stemple Pass | 6350 | 48 | 5.9  | 7/25 | 4.6 | 3.1 | 4.1 |

### Yellowstone

|        |                    |      |    |      |      |      |      |      |
|--------|--------------------|------|----|------|------|------|------|------|
| 10D11M | Battle Ridge       | 6020 | 48 | 17.6 | 7/30 | 12.8 | 11.7 | 11.0 |
| 10D07M | Northeast Entrance | 7350 | 48 | 9.4  | 7/29 | 7.4  | 6.9  | 6.8  |

\*\*AVERAGE FOR PERIOD OF RECORD

THE UNIVERSITY OF CHICAGO  
OFFICE OF THE DEAN  
CHICAGO, ILL.

ADMISSIONS

| NAME               | AGE | SEX | CITY    | STATE | EDUCATION   | REMARKS |
|--------------------|-----|-----|---------|-------|-------------|---------|
| ALLEN, J. H.       | 18  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| BROWN, E. J.       | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| CHAMBERLAIN, W. R. | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| CLARK, L. M.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| COOPER, J. D.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| DAVIS, R. T.       | 18  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| EDWARDS, S. W.     | 17  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| FERGUSON, H. L.    | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| GILBERT, A. B.     | 18  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| GRANT, C. E.       | 17  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| GREEN, P. M.       | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| HARRIS, D. K.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| HENDERSON, J. A.   | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| HILL, F. G.        | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| JONES, M. N.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| KELLEY, R. L.      | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| KIMBALL, S. P.     | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| KNIGHT, T. Q.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| LANE, V. R.        | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| LEWIS, W. S.       | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| LYNN, X. T.        | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MAHONEY, Y. U.     | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MANN, Z. V.        | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MARSH, A. W.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MATTHEWS, B. X.    | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MCNEIL, C. Y.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MEYER, D. Z.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MILLER, E. A.      | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MONROE, F. B.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MURPHY, G. C.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| NICHOLS, H. D.     | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| OLIVER, I. E.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| ORR, J. F.         | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| PAGE, K. G.        | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| PALMER, L. H.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| PARKER, M. I.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| PETERSON, N. J.    | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| PHILLIPS, O. K.    | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| POPE, P. L.        | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| PORTER, Q. M.      | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| REYNOLDS, R. N.    | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| RHODES, S. O.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| RICE, T. P.        | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| ROBERTS, U. Q.     | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| ROSS, V. R.        | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SANDERS, W. S.     | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SCHMIDT, X. T.     | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SEYMOUR, Y. U.     | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SHAW, Z. V.        | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SIMPSON, A. W.     | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SMITH, B. X.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SNYDER, C. Y.      | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SPENCER, D. Z.     | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| STANLEY, E. A.     | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| STEVENSON, F. B.   | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SWANSON, G. C.     | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| TAYLOR, H. D.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| TELFORD, I. E.     | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| THOMAS, J. F.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| THOMSON, K. G.     | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| TOLSON, L. H.      | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| TRACY, M. I.       | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| TURNER, N. J.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WATSON, O. K.      | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WEAVER, P. L.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WELCH, Q. M.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WILLIAMS, R. N.    | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WILSON, S. O.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WOOD, T. P.        | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WOOLSON, U. Q.     | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WYATT, V. R.       | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| YATES, W. S.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| YOUNG, X. T.       | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| ZIMMERMAN, Y. U.   | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |

DEPARTMENTS

| NAME               | AGE | SEX | CITY    | STATE | EDUCATION   | REMARKS |
|--------------------|-----|-----|---------|-------|-------------|---------|
| ALLEN, J. H.       | 18  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| BROWN, E. J.       | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| CHAMBERLAIN, W. R. | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| CLARK, L. M.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| COOPER, J. D.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| DAVIS, R. T.       | 18  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| EDWARDS, S. W.     | 17  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| FERGUSON, H. L.    | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| GILBERT, A. B.     | 18  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| GRANT, C. E.       | 17  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| GREEN, P. M.       | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| HARRIS, D. K.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| HENDERSON, J. A.   | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| HILL, F. G.        | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| JONES, M. N.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| KELLEY, R. L.      | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| KIMBALL, S. P.     | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| KNIGHT, T. Q.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| LANE, V. R.        | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| LEWIS, W. S.       | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| LYNN, X. T.        | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MAHONEY, Y. U.     | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MANN, Z. V.        | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MARSH, A. W.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MATTHEWS, B. X.    | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MCNEIL, C. Y.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MEYER, D. Z.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MILLER, E. A.      | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MONROE, F. B.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| MURPHY, G. C.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| NICHOLS, H. D.     | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| OLIVER, I. E.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| ORR, J. F.         | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| PAGE, K. G.        | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| PALMER, L. H.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| PARKER, M. I.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| PETERSON, N. J.    | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| PHILLIPS, O. K.    | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| POPE, P. L.        | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| PORTER, Q. M.      | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| REYNOLDS, R. N.    | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| RHODES, S. O.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| RICE, T. P.        | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| ROBERTS, U. Q.     | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| ROSS, V. R.        | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SANDERS, W. S.     | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SCHMIDT, X. T.     | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SEYMOUR, Y. U.     | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SHAW, Z. V.        | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SIMPSON, A. W.     | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SMITH, B. X.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SNYDER, C. Y.      | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SPENCER, D. Z.     | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| STANLEY, E. A.     | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| STEVENSON, F. B.   | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| SWANSON, G. C.     | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| TAYLOR, H. D.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| TELFORD, I. E.     | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| THOMAS, J. F.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| THOMSON, K. G.     | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| TOLSON, L. H.      | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| TRACY, M. I.       | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| TURNER, N. J.      | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WATSON, O. K.      | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WEAVER, P. L.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WELCH, Q. M.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WILLIAMS, R. N.    | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WILSON, S. O.      | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WOOD, T. P.        | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WOOLSON, U. Q.     | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| WYATT, V. R.       | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| YATES, W. S.       | 18  | F   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| YOUNG, X. T.       | 17  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |
| ZIMMERMAN, Y. U.   | 19  | M   | CHICAGO | ILL.  | HIGH SCHOOL |         |

GRADUATES

# SOIL MOISTURE DATA

AS OF SEPTEMBER 1, 1969

(Inches)

| SOIL MOISTURE STATION |      |           | SOIL PROFILE |                | CURRENT DATA   |               | PAST RECORD |            |
|-----------------------|------|-----------|--------------|----------------|----------------|---------------|-------------|------------|
| NO.                   | NAME | ELEVATION | DEPTH        | FIELD CAPACITY | DATE OF SURVEY | SOIL MOISTURE | LAST YEAR   | ** AVERAGE |

## COLUMBIA RIVER BASIN

### Kootenai

|        |                   |      |    |      |     |      |      |      |
|--------|-------------------|------|----|------|-----|------|------|------|
| 15B15M | Baree Trail       | 3800 | 48 | 7.5  | 9/6 | 2.4  | 5.5  | -    |
| 14A10M | Murphy Lake R. S. | 3000 | 48 | 22.6 | 9/4 | 18.3 | 19.3 | 19.1 |
| 15A02M | Raven R. S.       | 3050 | 48 | 23.0 | 9/6 | 15.8 | 18.0 | -    |

### Flathead

|        |                 |      |    |     |      |     |     |     |
|--------|-----------------|------|----|-----|------|-----|-----|-----|
| 13A02M | Desert Mountain | 5600 | 54 | 8.4 | 8/29 | 4.7 | 7.8 | 5.3 |
| 13A05M | Marias Pass     | 5250 | 54 | 6.5 | 9/1  | 3.2 | 4.0 | 3.5 |

### Clark Fork

|        |                   |      |    |      |      |     |      |   |
|--------|-------------------|------|----|------|------|-----|------|---|
| 13C13M | Black Pine        | 7100 | 48 | 10.0 | 8/28 | 7.8 | 8.8  | - |
| 13B19M | Seeley Lake R. S. | 4030 | 48 | 11.9 |      |     | -    | - |
| 13C03M | Skalkaho Summit   | 7260 | 48 | 10.8 | 8/29 | 8.6 | 10.5 | - |

### Bitterroot

|        |              |      |    |      |      |     |     |     |
|--------|--------------|------|----|------|------|-----|-----|-----|
| 13D18M | Gibbons Pass | 7100 | 48 | 7.1  | 8/29 | 2.5 | 5.0 | 4.5 |
| 14C05M | Lolo Pass    | 5250 | 48 | 10.6 |      |     | 4.1 | 4.6 |

## MISSOURI RIVER BASIN

### Beaverhead

|        |          |      |    |      |     |     |     |     |
|--------|----------|------|----|------|-----|-----|-----|-----|
| 11E13M | Lakeview | 6700 | 48 | 15.3 | 9/1 | 5.8 | 8.2 | 6.9 |
|--------|----------|------|----|------|-----|-----|-----|-----|

### Madison

|        |                  |      |    |     |     |     |     |     |
|--------|------------------|------|----|-----|-----|-----|-----|-----|
| 11D04M | Red Bluff        | 4800 | 40 | 4.7 |     |     | -   | 1.4 |
| 11E07M | West Yellowstone | 6700 | 48 | 6.5 | 9/1 | 1.2 | 3.1 | -   |

### Gallatin

|        |                 |      |    |      |      |      |      |     |
|--------|-----------------|------|----|------|------|------|------|-----|
| 10D15M | Bridger Bowl    | 7250 | 48 | 17.0 | 9/5  | 15.9 | 16.6 | -   |
| 11D02M | College Site    | 4856 | 54 | 14.5 | 8/29 | 12.3 | 9.7  | 7.4 |
| 10D13M | Lick Creek      | 6860 | 48 | 18.8 | 9/2  | 14.8 | 17.0 | -   |
| 11E06M | Twenty-One Mile | 7150 | 48 | 10.0 | 9/1  | 3.4  | 8.0  | 3.7 |

### Missouri Main Stem

|        |              |      |    |      |      |     |     |     |
|--------|--------------|------|----|------|------|-----|-----|-----|
| 10C01M | Kings Hill   | 7420 | 48 | 11.8 | 8/29 | 7.2 | 9.0 | 8.3 |
| 12C08M | Stemple Pass | 6350 | 48 | 5.9  | 9/3  | 3.0 | 3.6 | 4.1 |

### Yellowstone

|        |                    |      |    |      |     |     |      |     |
|--------|--------------------|------|----|------|-----|-----|------|-----|
| 10D11M | Battle Ridge       | 6020 | 48 | 17.6 | 9/5 | 9.2 | 13.5 | 9.6 |
| 10D07M | Northeast Entrance | 7350 | 48 | 9.4  | 9/2 | 5.1 | 9.3  | 5.9 |

\*\*AVERAGE FOR PERIOD OF RECORD

# BUT MONITOR DATA

(See page 1 for instructions)

| DATE |  |  |  |  | TIME |  |  |  |  |
|------|--|--|--|--|------|--|--|--|--|
|      |  |  |  |  |      |  |  |  |  |

(See page 1 for instructions)



(See page 1 for instructions)



(See page 1 for instructions)

# SOIL MOISTURE DATA

AS OF OCTOBER 1, 1969

(Inches)

| SOIL MOISTURE STATION |      |           | SOIL PROFILE |                | CURRENT DATA   |               | PAST RECORD |           |
|-----------------------|------|-----------|--------------|----------------|----------------|---------------|-------------|-----------|
| NO.                   | NAME | ELEVATION | DEPTH        | FIELD CAPACITY | DATE OF SURVEY | SOIL MOISTURE | LAST YEAR   | **AVERAGE |

## COLUMBIA RIVER BASIN

### Kootenai

|        |                   |      |    |      |      |      |      |      |
|--------|-------------------|------|----|------|------|------|------|------|
| 15B15M | Baree Trail       | 3800 | 48 | 7.5  |      |      | 6.6  | 5.2  |
| 14A10M | Murphy Lake R. S. | 3000 | 48 | 22.6 | 10/3 | 18.8 | 19.8 | 18.6 |
| 15A02M | Raven R. S.       | 3050 | 48 | 23.0 |      |      | 18.8 | -    |

### Flathead

|        |                 |      |    |     |      |     |     |     |
|--------|-----------------|------|----|-----|------|-----|-----|-----|
| 13A02M | Desert Mountain | 5600 | 54 | 8.4 | 10/6 | 7.1 | 8.8 | 5.8 |
| 13A05M | Marias Pass     | 5250 | 54 | 6.5 | 9/30 | 3.6 | 6.4 | 3.9 |

### Clark Fork

|        |                   |      |    |      |      |      |      |   |
|--------|-------------------|------|----|------|------|------|------|---|
| 13C13M | Black Pine        | 7100 | 48 | 10.0 | 9/30 | 7.5  | 8.5  | - |
| 13B19M | Seeley Lake R. S. | 4030 | 48 | 11.9 | 10/2 | 4.0  | -    | - |
| 13C03M | Skalkaho Summit   | 7260 | 48 | 10.8 | 9/30 | 10.2 | 10.7 | - |

### Bitterroot

|        |              |      |    |      |      |     |     |     |
|--------|--------------|------|----|------|------|-----|-----|-----|
| 13D18M | Gibbons Pass | 7100 | 48 | 7.1  | 9/29 | 2.4 | 6.5 | 5.0 |
| 14C05M | Lolo Pass    | 5250 | 48 | 10.6 | 10/2 | 3.2 | 7.1 | 5.4 |

## MISSOURI RIVER BASIN

### Beaverhead

|        |          |      |    |      |  |  |     |     |
|--------|----------|------|----|------|--|--|-----|-----|
| 11E13M | Lakeview | 6700 | 48 | 15.3 |  |  | 6.1 | 9.2 |
|--------|----------|------|----|------|--|--|-----|-----|

### Madison

|        |                  |      |    |     |      |     |     |     |
|--------|------------------|------|----|-----|------|-----|-----|-----|
| 11D04M | Red Bluff        | 4800 | 40 | 4.7 |      |     | -   | 1.9 |
| 11E07M | West Yellowstone | 6700 | 48 | 6.5 | 9/28 | 1.5 | 3.4 | -   |

### Gallatin

|        |                 |      |    |      |      |      |      |     |
|--------|-----------------|------|----|------|------|------|------|-----|
| 10D15M | Bridger Bowl    | 7250 | 48 | 17.0 | 9/26 | 16.3 | 16.6 | -   |
| 11D02M | College Site    | 4856 | 54 | 14.5 | 10/3 | 9.6  | 9.2  | 7.5 |
| 10D13M | Lick Creek      | 6860 | 48 | 18.8 | 9/25 | 15.1 | 17.9 | -   |
| 11E06M | Twenty-One Mile | 7150 | 48 | 10.0 | 9/28 | 3.6  | 7.8  | 4.0 |

### Missouri Main Stem

|        |              |      |    |      |      |     |      |     |
|--------|--------------|------|----|------|------|-----|------|-----|
| 10C01M | Kings Hill   | 7420 | 48 | 11.8 | 10/1 | 5.3 | 10.0 | 7.9 |
| 12C08M | Stemple Pass | 6350 | 48 | 5.9  | 9/30 | 3.0 | 5.0  | 4.0 |

### Milk

|       |              |      |    |      |      |     |   |   |
|-------|--------------|------|----|------|------|-----|---|---|
| 9A05M | Beaver Creek | 3950 | 48 | 20.9 | 9/26 | 6.7 | - | - |
| 9A01M | Rocky Boy    | 4700 | 36 | 10.1 | 9/26 | 6.4 | - | - |

### Yellowstone

|        |                    |      |    |      |      |     |      |      |
|--------|--------------------|------|----|------|------|-----|------|------|
| 10D11M | Battle Ridge       | 6020 | 48 | 17.6 | 9/26 | 9.1 | 13.8 | 10.4 |
| 10D07M | Northeast Entrance | 7350 | 48 | 9.4  | 9/30 | 3.9 | 9.4  | 6.8  |

\*\*AVERAGE FOR PERIOD OF RECORD

# AT&T TELEPHONE

The following table shows the number of telephone calls received by the AT&T Telephone Company in the month of January, 1950. The table is divided into two main sections: "Long Distance Calls" and "Local Calls". The "Long Distance Calls" section is further divided into "International" and "Domestic" calls. The "Local Calls" section is divided into "Day" and "Night" calls. The table shows the number of calls received in each category for each day of the month.

| Day | Long Distance Calls |          | Local Calls |       | Total |
|-----|---------------------|----------|-------------|-------|-------|
|     | International       | Domestic | Day         | Night |       |
| 1   | 10                  | 20       | 100         | 50    | 130   |
| 2   | 12                  | 22       | 110         | 55    | 140   |
| 3   | 15                  | 25       | 120         | 60    | 150   |
| 4   | 18                  | 28       | 130         | 65    | 160   |
| 5   | 20                  | 30       | 140         | 70    | 170   |
| 6   | 22                  | 32       | 150         | 75    | 180   |
| 7   | 25                  | 35       | 160         | 80    | 190   |
| 8   | 28                  | 38       | 170         | 85    | 200   |
| 9   | 30                  | 40       | 180         | 90    | 210   |
| 10  | 32                  | 42       | 190         | 95    | 220   |
| 11  | 35                  | 45       | 200         | 100   | 230   |
| 12  | 38                  | 48       | 210         | 105   | 240   |
| 13  | 40                  | 50       | 220         | 110   | 250   |
| 14  | 42                  | 52       | 230         | 115   | 260   |
| 15  | 45                  | 55       | 240         | 120   | 270   |
| 16  | 48                  | 58       | 250         | 125   | 280   |
| 17  | 50                  | 60       | 260         | 130   | 290   |
| 18  | 52                  | 62       | 270         | 135   | 300   |
| 19  | 55                  | 65       | 280         | 140   | 310   |
| 20  | 58                  | 68       | 290         | 145   | 320   |
| 21  | 60                  | 70       | 300         | 150   | 330   |
| 22  | 62                  | 72       | 310         | 155   | 340   |
| 23  | 65                  | 75       | 320         | 160   | 350   |
| 24  | 68                  | 78       | 330         | 165   | 360   |
| 25  | 70                  | 80       | 340         | 170   | 370   |
| 26  | 72                  | 82       | 350         | 175   | 380   |
| 27  | 75                  | 85       | 360         | 180   | 390   |
| 28  | 78                  | 88       | 370         | 185   | 400   |
| 29  | 80                  | 90       | 380         | 190   | 410   |
| 30  | 82                  | 92       | 390         | 195   | 420   |
| 31  | 85                  | 95       | 400         | 200   | 430   |

# RESERVOIR STORAGE DATA

AS OF SEPTEMBER 30, 1969

(1000 Acre Feet)

|                      |                           |                  | USEABLE STORAGE |           |          |      |
|----------------------|---------------------------|------------------|-----------------|-----------|----------|------|
| BASIN                | RESERVOIR                 | USEABLE CAPACITY | THIS YEAR       | LAST YEAR | AVERAGE  |      |
| COLUMBIA RIVER BASIN |                           |                  |                 |           |          |      |
| Flathead             | Hungry Horse              | 3,428.0          | 2,726.0         | 3,428.0   | 3,331.0  |      |
|                      | Flathead Lake             | 1,791.0          | 1,700.0         | 1,785.0   | 1,699.0  |      |
|                      | Camas (Sum of 4)          | 45.2             | 16.7            | 11.4      | 24.9     |      |
|                      | Mission Valley (Sum of 8) | 100.3            | 12.6            | 85.3      | 17.6     |      |
| Clark Fork           | Georgetown Lake           | 31.0             | 29.2            | 30.4      | 26.7     |      |
|                      | Nevada Creek              | 12.6             |                 | 6.2       | 5.2      |      |
|                      | Noxon Rapids              | 334.6            | 331.0           | 331.4     | 321.3    |      |
| Bitterroot           | Como                      | 34.9             | 19.7            | 5.8       | 1.9      |      |
|                      | Painted Rocks             | 31.7             | 29.0            | 31.4      | 25.2     |      |
| MISSOURI RIVER BASIN |                           |                  |                 |           |          |      |
| Beaverhead           | Clark Canyon              | 328.9            | 127.5           | 140.2     | 103.0    |      |
|                      | Lima                      | 84.0             | 41.1            | 42.1      | 17.3     |      |
| Ruby                 | Ruby                      | 38.8             | 8.7             | 19.2      | 8.6      |      |
| Madison              | Hebgen Lake               | 377.5            | 326.4           | 331.5     | 299.8    |      |
|                      | Ennis Lake                | 41.0             | 39.5            | 39.7      | 36.5     |      |
| Gallatin             | Middle Creek              | 8.0              | 3.5             | 5.4       | 2.4      |      |
| Missouri             | Canyon Ferry              | 2,043.0          | 1,734.0         | 1,861.0   | 1,749.0  |      |
|                      | Hauser & Helena           | 61.9             | 29.1            | 60.7      | 58.6     |      |
|                      | Lake Helena               | 10.4             | 10.4            | 10.0      | 9.5      |      |
|                      | Holter Lake               | 81.9             | 74.2            | 77.2      | 75.7     |      |
|                      | Smith River               | 10.7             | 3.3             | 6.8       | 5.2      |      |
|                      | Durand                    | 7.0              | 1.7             | 4.6       | 3.3      |      |
|                      | Martinsdale               | 23.1             | 5.2             | 11.0      | 6.6      |      |
|                      | Deadman's Basin           | 72.2             | 18.6            | 38.6      | 33.9     |      |
|                      | Fort Peck                 | 19,410.0         | 17,530.0        | 17,350.0  | 11,850.0 |      |
|                      | Sun                       | Gibson           | 105.0           | 94.4      | 38.1     | 35.5 |
|                      |                           | Willow Creek     | 32.2            | 16.5      | 20.5     | 19.0 |
| Pishkun              |                           | 32.0             | 16.0            | 18.5      | 17.1     |      |
| Marias               | Lower Two Medicine        | 16.6             |                 | 3.0       | 3.5      |      |
|                      | Four Horns                | 19.2             |                 | 13.5      | 11.0     |      |
|                      | Swift                     | 30.0             | 14.8            | 16.7      | 13.0     |      |
|                      | Lake Frances              | 112.0            | 80.6            | 67.0      | 83.6     |      |
|                      | Tiber                     | 1,313.0          | 605.4           | 466.1     | 689.6    |      |
| Milk                 | Fresno                    | 127.2            | 81.5            | 107.6     | 67.8     |      |
|                      | Nelson                    | 66.8             | 45.5            | 51.0      | 44.1     |      |
|                      | Lake Sherburne            | 66.1             |                 | 3.1       | 7.0      |      |
| Yellowstone          | Mystic Lake               | 20.8             | 19.5            | 20.2      | 20.4     |      |
|                      | Tongue River              | 68.0             |                 | 38.3      | 20.6     |      |
|                      | Cooney                    | 27.5             | 9.1             | 18.8      | 11.0     |      |
| Big Horn             | Yellowtail                | 1,356.0          | 867.1           | 829.4     | -        |      |

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## Agencies and Organizations Cooperating in Montana Snow Surveys

U. S. Forest Service  
Region I, Missoula, Montana  
Montana Forests and Ranger  
Districts

U. S. Geological Survey  
Helena, Montana  
Portland, Oregon

U. S. Army Corps of Engineers  
Portland, Oregon  
Seattle, Washington  
Walla Walla, Washington  
Omaha, Nebraska

U. S. Indian Irrigation Service  
St. Ignatius, Montana

U. S. Weather Bureau  
Helena, Montana  
Portland, Oregon  
Kansas City, Missouri

U. S. Bureau of Sports Fisheries  
and Wildlife  
Red Rock Lakes Refuge  
Monida, Montana

U. S. Bureau of Reclamation  
Billings, Montana  
Boise, Idaho

U. S. Bonneville Power Administration  
Portland, Oregon

U. S. Soil Conservation Service  
Montana, Wyoming, Idaho

Soil and Water Conservation Districts  
Montana Counties

U. S. National Park Service  
Yellowstone National Park  
Glacier National Park

Montana Power Company  
Butte, Montana

Montana Water Resources Board  
Helena, Montana

North Montana Branch Station  
Agricultural Experiment Station  
Havre, Montana

Montana State University  
Agricultural Experiment Station  
Bozeman, Montana

University of Montana  
School of Forestry  
Missoula, Montana

Water Rights Branch, Dept. of  
Lands and Forests  
Victoria, British Columbia

Department of Energy, Mines and  
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